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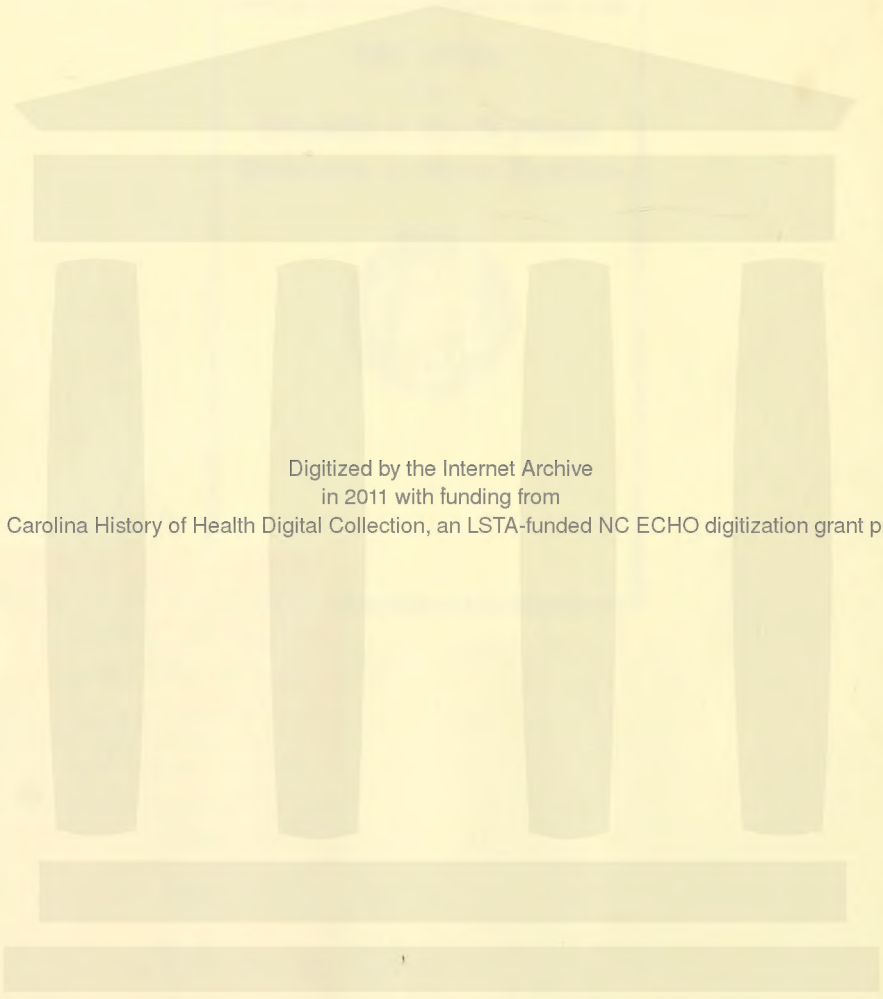
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IN THIS ISSUE:

Problems In The Diagnosis Of Renal Disease

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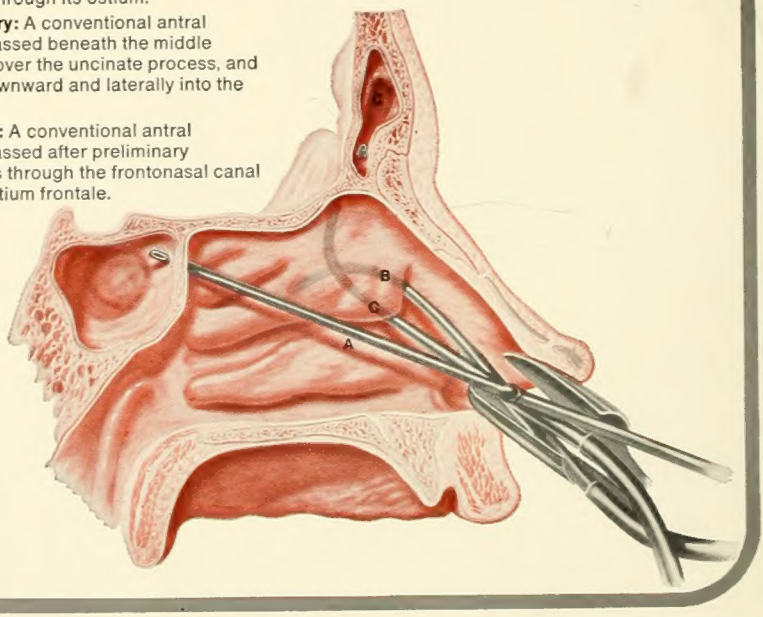
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A rhinologic approach to the sinuses
Sagittal anatomical section of nasal cavity showing approach for probing or irrigation by cannulas.

A—Sphenoid: A sphenoid cannula (under 13.5 cm.) passed around the middle and superior turbinates to the anterior wall of the sinus through its ostium.

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NORTH CAROLINA MEDICAL JOURNAL

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Problems in Diagnosis of Renal Disease

CHRISTOPHER C. FORDHAM, III, M.D.

CHAPEL HILL

I propose to discuss three specific aspects of renal diagnosis and should like first to mention several interesting ways in which *acute* glomerulonephritis may masquerade. For purposes of review, the major manifestations of acute glomerulonephritis may be conveniently placed into two groups: (1) those associated with the urinary tract, including hematuria and proteinuria, together with disturbances in urine flow; and (2) those associated with the cardiovascular system, including hypertension, edema, and circulatory congestion. Either of these two groups of manifestations may dominate the early clinical picture of acute glomerulonephritis.

Generalized seizures due to hypertensive encephalopathy may antedate by many hours recognition of acute nephritis, especially in the pediatric age group. Similarly, the relatively acute onset of congestive heart failure in children or adults may only in retrospect be recognized as having been initiated by an acute glomerular disorder. This sequence of events is especially likely to deceive when the urine is scanty and the urinary picture unimpressive. It has long been known and recently reasserted[1] that clearly significant proteinuria may be absent during the course of acute glomerulonephritis. If one visualizes the histologic lesion as that of an acute diffuse obliterative glomerulitis, it is reasonable to expect a small filtered load of protein and a smaller quantity in the final urine, the latter having been subjected to the tubular reabsorptive sites. Microscopic hematuria is usually present, but on occasion it may not be sufficiently impressive to alert the clinician as to the nature of the circulatory troubles. The finding of red blood cell casts, of course, should arouse prompt suspicion of glomerulitis. Even when gross hematuria is part of the clinical syndrome, it may not be present initially. Of course, in other instances of the disease, the urinary abnormalities, ranging from gross hematuria to moderate proteinuria and microscopic hematuria, may dominate the clinical picture, and cardiovascular abnormalities may be minimal or absent.

If the urinary and cardiovascular manifestations occur simultaneously, as is often the case, recognition of the disorder is not difficult, especially if an appropriate history of antecedent streptococcal infection can be obtained. Further, if the urinary manifestations occur first, recognition of the disorder is usually prompt, and indeed, the circulatory disturbances may be prevented by appropriate measures, including bed rest in semi-recumbent position. If, however, the circulatory disturbances appear first, especially in the form of hypertensive encephalopathy or acute pulmonary edema, recognition may be difficult, and under these circumstances, one should always consider the possibility of acute glomerulonephritis.

Cardiovascular Manifestations

The circulatory congestion associated with acute nephritis represents an interesting state of disturbed physiology, and the manifestations appear to be the clinical prototype of what may be induced in the laboratory by the rapid infusion of salt and water in the intact animal. Eichna and his co-workers[2] first demonstrated the important ways

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Table 1
Similarities Between Congestive Heart Failure and Noncardiac Circulatory Congestion

Congestive Heart Failure	Noncardiac Circulatory Congestion
Cardiac enlargement	Cardiac enlargement
Pulmonary congestion	Pulmonary congestion
Edema	Edema
Increased venous pressure	Increased venous pressure
ECG abnormalities	ECG Abnormalities
Response to bed rest and salt restriction	Response to bed rest and salt restriction

in which the hemodynamic characteristics of acute glomerulonephritis differ from those in ordinary heart failure. Their findings have been elaborated upon by others [3, 4], and the similarities and differences are summarized in tables 1 and 2. The similarities include cardiac enlargement, pulmonary congestion, peripheral edema, increased venous pressure, a variety of electrocardiographic abnormalities, and a favorable therapeutic response to bed rest and salt restriction. Cardiac enlargement often precedes detectable pulmonary congestion in ordinary heart failure, whereas the reverse may be true in acute nephritis.

The ways in which the circulatory congestion of acute nephritis often differs from ordinary heart failure include a normal to increased cardiac output, a normal to decreased circulation time, a decreased blood hematocrit, a normal to reduced AV oxygen difference, and a decreased filtration fraction. The response to digitalis may be another differentiating feature in that the few available measurements under controlled conditions have failed to provide evidence that this drug has a significant impact upon the circulatory congestion of acute nephritis.

This is not to say that ordinary heart failure may not supervene in acute nephritis, and indeed, in light of the hypertension which may be present, ventricular dilatation which may occur, and the interstitial myocarditis which has been reported[5], it is reasonable to treat the patient as though he had ordinary heart failure. However, it is worth recognizing these physiologic differences, and therefore emphasizing the limitation in salt and water intake, together with bed rest in a semi-recumbent position[6]. If digitalis is administered, one must be careful to avoid the precipitous changes in serum potassium which may occur during the diuretic phase and which may precipitate cardiac arrhythmias.

Chronic vs. Acute Renal Disease

I should like to turn next briefly to the matter of differentiating chronic renal disease, which may be structurally irreversible, from acute to subacute disease, which sometimes is in part structurally reversible. I qualify the term because patients with structurally irreversible renal disease may obtain a dramatic remission in clinical and chemical abnormalities from the appropriate correction of temporary complicating factors, such as dehydration (often incidental to inappropriate salt restriction), congestive heart failure, active systemic or renal infection, or certain electrolyte disturbances, such as hypercalcemia.

My attention at this time is rather directed at the matter of assessing structural reversibility. The severity of renal impairment and associated chemical disturbances often does not permit this kind of discrimination because: (a) chronic disease may be clinically quiescent until advanced renal destruction has occurred, and (b) the chemical and histologic changes of chronic disease may occur in a relatively short time. The latter observation has been confirmed by serial renal biopsies in patients with acute renal diseases such as glomerulonephritis and lupus nephritis, which may evolve into histologically chronic disease within a matter of weeks.

Among the helpful clues as to chronicity and potential structural reversibility, in addition to the clinical and laboratory findings, may be included a careful assessment of renal size, shape and symmetry by x-ray: plain films, laminography, and pyelography. If the kidneys can be shown to be clearly clearly contracted, say less than 10 cm. in

Table 2
Differences Between Congestive Heart Failure and Noncardiac Circulatory Congestion

Congestive Heart Failure	Noncardiac Circulatory Congestion
Cardiac output decreased	Cardiac output decreased
Circulation time increased	Circulation time normal or decreased
Hematocrit normal or increased	Hematocrit normal or decreased
A-V 0_2 difference increased	A-V 0_2 difference, normal
Filtration fraction increased	Filtration fraction decreased
Response to digitalis +	Response to digitalis ±

longitudinal axis in an adult patient, it is likely that the disease is long standing.

To illustrate, a 53 year old woman with a negative history for urinary tract infection or renal disease came to the attention of her physician after a fainting episode and was found to be anemic and, somewhat later, azotemic. She had never been pregnant nor undergone urologic study except for the collection of urine specimens by catheterization on several occasions in the past. Urine cultures were negative. She presented, then, the clinical and chemical picture of renal failure of unknown duration and unknown etiology. Films of the abdomen showed contraction of the kidneys, suggesting a long-standing process. A percutaneous renal biopsy demonstrated advanced interstitial disease with glomerular atrophy. Structural irreversibility was suggested by the presence of contracted kidneys, and the renal biopsy tended to confirm this conclusion.

A second illustration of the problem of renal failure of unknown etiology and duration is that of a 43 year old woman who was apparently well until eight weeks before admission, when she experienced several episodes of syncope; in the ensuing weeks she noted the onset of anorexia, weight loss of 25 pounds, and for three weeks prior to admission swelling of her ankles. She was normotensive, the eye grounds were negative, and the heart was not enlarged. The hematocrit was 28%, the blood urea nitrogen 121 mg./100 ml., and the carbon dioxide 12 mEq./liter; the urine contained protein, 3 to 4 plus, and a few granular and hyaline casts.

Here again there was evidence of renal failure with anemia and azotemia, associated with symptoms of relatively brief duration. Abdominal films showed symmetrical renal shadows which were thought to represent enlarged kidneys. The absence of renal contraction despite the evidence of advanced renal insufficiency suggested the possibility of an acute or subacute disorder, or some form of chronic renal disease often characterized by sizable kidneys, such as amyloid infiltration. A percutaneous renal biopsy disclosed the latter diagnosis. The enlarged kidney shadows on x-ray had represented a valid, but nonspecific, diagnostic clue.

The evaluation of renal size and symmetry by x-ray may also be helpful in the problem of differentiating acute or subacute glomerulonephritis from chronic glomerulonephritis associated with an acute exacerbation. However, there are serious difficulties in assessing kidney size by x-ray, especially when renal impairment precludes adequate intravenous pyelograms. Laminograms may at times be helpful. Double dose intravenous urography with tomograms has recently been described as a helpful techniquet for visualizing the urinary tract in the presence of renal failure[7]. By this method one may exclude urinary tract obstruction without resorting to retrograde study and its attendant hazards. Suspicion of multiple myeloma would contraindicate the intravenous injection of contrast media for this purpose because of the untoward reactions which have been described therefrom. The renal scan using labeled Mercuhydrin appears to be a useful technique for locating and comparing the kidneys; whether this method will reliably indicate renal size has not yet been established.

In summary, it is pertinent to undertake careful evaluation of renal size and symmetry by radiologic techniques in patients who present diagnostic problems associated with kidney involvement. The currently available techniques, however, are not en-

tirely reliable and may occasionally be significantly misleading.

"Phenacetin Nephritis"

I should like to take the remaning time to consider briefly the so-called "phenacetin nephritis," which has become a subject of much interest in recent years. The relationship between excessive use of analgesic medication and the development of renal disease has attracted increasing attention since Scandinavian workers first suggested the association over a decade ago[8], and may prove to be of especial interest to us here in the headache-powder belt[9]. The amount of medication consumed by some of the patients studied has been enormous. Instances are known where the equivalent of the patient's own body weight has been consumed over a period of years.

The drug phenacetin, or acetophenetidin, has been incriminated largely on epidemiologic grounds. It has been one of the major components of most of the preparations reported to present this association. The drug is sometimes taken for headache, and is thought by some to produce headache as a toxic side effect, so that consumption tends to increase as the weeks, months, and years go by. Phenacetin-containing preparations appear to be remarkably well tolerated, and very large quantities may be consumed without prohibitive gastrointestinal or other organ system symptoms. Although some patients appear to start taking these preparations for specific complaints such as headache, many others are unable to provide a concrete reason for the medication: it appears to invoke a subjective response which is not well characterized but may be akin to euphoria. This aspect of the problem also needs more study.

As is the case with drug habituees of other sorts, these patients often do not give reliable histories, especially with reference to drugs. Therefore, if the association is suspected but denied, it is essential to question relatives. Since the breakdown products of acetophenetidin induce the formation of methemoglobinemia, spectroscopic examination of the blood for this compound may be helpful in diagnosis where the history is unreliable, if performed within one to two days of the last ingested dose.

Since becoming more aware of this possible association as a result of the increasing numbers of reported cases, we have seen several patients who present the findings described by others. Very often the patient is first found to have a profound degree of anemia and complaints of a generalized character, including weight loss and weakness. The urine may be relatively unimpressive and the azotemia and metabolic acidosis surprisingly severe. This kind of patient confirms the dictum that one should always determine the blood urea nitrogen in the presence of unexplained anemia. Because of the frequency of chronic pyelonephritis and evidence that phenacetin abuse may increase susceptibility to renal infection, it is paramount in such patients to culture and reculture the urine and to administer appropriate antibiotics when significant organisms can be obtained, remembering that some of the antibiotics will be poorly excreted in a patient with renal insufficiency[10].

There is some evidence to suggest a degree of reversibility, at least in terms of renal function, when acetophenetidin ingestion is discontinued in such patients. This has not yet been satisfactorily established, and certainly its structural counterpart is completely unknown, but the preliminary data are sufficient to make the diagnosis and elimination of the drug desirable. Unfortunately, in several cases in our series, the patient has been discharged from the hospital much improved after correction of the profound metabolic acidosis and the disordered state of hydration, and after elimination of the drug ingestion, only to return several months later, presenting an essentially similar pattern of drug ingestion and profound renal failure. Such cases suggest that the degree of habituation may be very strong indeed, and it is significant that several of our patients appeared to begin taking headache powders after giving up alcohol, having formerly been heavy and regular drinkers.

Having mentioned the epidemiologic nature of the association and described the kinds of patients that we and others have seen presenting it, I should like to say a few words about the renal lesion itself. The

characteristic structural changes include interstitial nephritis and papillary necrosis. In connection with the latter, it may be useful to examine the urine for sloughed papillae; we have made this observation in one patient. A third major structural finding is a variable degree of pyelonephritis, characterized by tubular dilatation, inflammatory infiltration, and glomerular atrophy. The pathogenesis of these changes is unknown.

Animal studies

In evaluating the phenacetin-nephritis relationship further, at least two major problems remain[11]: One is the validity of the epidemiologic data—and I think it is fair to assert that they are suggestive but not conclusive; more and better epidemiologic studies are needed. A second is the problem of reproducing the lesion in an experimental model, and although many animal studies have been performed, very little success has been reported in producing a renal lesion by the use of analgesic mixtures or components thereof. Quite recently in our laboratory[12] we have succeeded in producing a lesion in the medulla of rat kidneys by the administration of USP acetophenetidin by daily gavage for a four-week period in Sprague-Dawley rats. The observed changes in the medullary region of the kidneys of drug-fed animals include an increased number of mitotic figures and marked swelling of the nuclei and cells of the tubular epithelium as compared with the control animals. These histologic changes were associated with functional evidence of a mild concentrating defect, together with anemia, mild azotemia, and reduction of the carbon dioxide content at the termination of the experiment. Papillary tip lesions were seen in 3 of 39 animals. Although the doses of medication used were large, 60 to 70% of the animals survived three separate experiments, and were able to consume a sustaining quantity of food. We have demonstrated, then, that USP phenacetin can be shown to produce a functional and structural lesion in rats when given in large doses over a four-week period. We do not know how the injury comes about or whether it is comparable with the human lesion.

Finally, it is possible that a genetic predisposition to the action of the drug is required for the lesion to occur, since it would appear that many individuals who take large doses of drugs containing acetophenetidin over long periods do not develop discernible renal disease. Also, I know of no evidence which suggests that the occasional use of phenacetin-containing analgesics in modest doses injures the kidney.

In summary, there are epidemiologic data to suggest a consequential association between the accumulative ingestion of large amounts of phenacetin-containing compounds and the development of chronic renal disease. There is now experimental evidence that renal impairment can be induced in the rat by the administration of acetophenetidin in large doses. The available data do not, however, establish a cause-and-effect relationship in man. The physician should, therefore, simply be aware of this possible relationship, in order to undertake preventive and perhaps partially corrective measures where appropriate.

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Oral Agents in Cases of Diabetes Mellitus Previously Controlled by Low Doses of Insulin

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and
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Durham
Charles W. Styron, M.D.
Raleigh

The introduction of oral agents has simlified the management of diabetes mellitus for both patient and physician. Unfortunately the simplicity of management thus afforded has resulted often in deterioration of patient instruction, education, and close supervision. In addition, inadequate control is accepted by the patient, and sometimes by the physician, because of the unwillingness to undertake the more stringent program of insulin administration.

The decision to use oral agents is made usually on the basis of a therapeutic trial. Certain patients should be excluded from this form of treatment at the outset. In general they fall into the following groups: growth onset of diabetes, underweight patients of any age, ketoacidosis-prone patients, and patients under physiologic or pathologic stress—for example, patients with pregnancy, retinopathy, nephropathy, neuropathy, and acute or chronic infection.

Response to the therapeutic trial is classified as follows: satisfactory response, with normoglycemia throughout the 24-hour period and aglycosuria; marginal response, with moderate hyperglycemia of 170 to 200 mg/100 ml and glycosuria one to two hours after meals; and unsatisfactory response, with continued nonfasting hyperglycemia of more than 200 mg/100 ml and glycosuria.

In our experience many cases of diabetes which previously had been well controlled by insulin therapy have been poorly controlled since the change to oral agents; yet the patients have continued to accept the latter because of the absence of untoward symptoms and the relative freedom oral agents afford. However, one of us (C.W.S.) has encountered two patients in whom advanced retinitis proliferans developed during a two-year to three-year period of extremely poor control when the medication was changed from insulin to tolbutamide. Both of these cases are now well controlled on less than 20 units of insulin per day.

Because of the erroneous impression that patients who require small doses of insulin for control of diabetes may do equally well with oral agents, we report a group of selected cases in which oral drugs obviously failed, but which responded well to small daily doses of insulin, generally less than 10 units.

Illustrative Cases

Case 1

A 27 year old white man had been found to have diabetes mellitus in 1955, at the age of 19. The father had developed the disease at the age of 50.

The physical findings were normal (height 71 inches, weight 168 pounds). The initial fasting blood sugar was 290 mg/100 ml, with glycosuria of more than 2%. The patient was treated with diet and crystalline zinc insulin during the first weeks of diabetes, and subsequently became aglycosuric and normoglycemic. He then adhered to a restricted diet without insulin for a period of two years, during which he was glycosuric and hyperglycemic but not ketonuric. From 1958 to 1962 he received tolbutamide, 1 to 2 gm daily in divided doses. During this time he continued to be glycosuric and hyperglycemic but aketonuric.

In January, 1962, the patient came to us for treatment. Excellent control, marked by normoglycemia and aglycosuria, was achieved when tolbutamide was discontinued and replaced by 10 units of NPH insulin before breakfast daily. In September, 1962, he was given a further trial of an oral hypoglycemic agent of the sulfonylurea class. From September to December, 1962, while taking maximum doses of this drug, fasting blood sugar levels ranged from 162 to 177 mg

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†Supported by a USPHS training grant, No. 3T1 AM 5074-0851.

and two-hour blood sugar levels from 228 to 236 mg/100 ml. Glycosuria ranged from 1 to 2% throughout the day and on arising. In December, 1962, the administration of the sulfonylurea agent was discontinued and replaced again by 10 units of NPH insulin given before breakfast daily.

The patient has since had normal fasting blood sugar and two-hour p.c. blood sugar levels, ranging from 123 to 128 mg/100 ml. His weight has remained constant and he has felt improvement in strength and sense of well-being, which had been absent on the previous regimen of oral hypoglycemic agents.

Comment: This patient failed to do well on oral hypoglycemic agents given in maximum dosage. Since he was free of acute complications during this time, there was a long delay before he was returned to therapy with insulin. While taking 10 units of NPH insulin daily he was normoglycemic and aglycosuric both on fasting and postprandially. When he was restored to a state of good control with insulin, there was great improvement in strength and stamina. The marginal control afforded by tolbutamide encouraged its use, whereas the excellent control attained with insulin indicates that, in this instance, the latter was the treatment of choice.

Case 2

A 44 year old Negro woman had been found, in 1957, to have diabetes mellitus at the age of 38. Her maternal grandfather also had the disease. The physical examination was essentially normal. She is 60 inches tall. In 1957 she weighed 97 pounds and at the present time weighs 87 pounds. When she was first seen, her fasting blood sugar ranged from 300 to 400 mg/100 ml, and glycosuria was more than 2%. The diabetes remained uncontrolled despite the administration of 3 gm of tolbutamide daily and strict adherence to a 2100 calorie diet. In 1958 the substitution of protamine zinc insulin, 40 units daily, resulted in good control of the blood sugar and urine sugar. Over the following five years the insulin dosage was reduced progressively to 20 units. In May, 1962, with the latter dosage, the fasting blood sugar ranged from 72 to 130 mg/100 ml and the two-hour postprandial sugar was 137 mg/100 ml. The only abnormality at this time was the presence of a few microaneurysms in the fundi.

In January, 1963, a trial of an experimental oral hypoglycemic agent of the sulfonylurea type was undertaken. Over the ensuing months the initial daily dosage of 200 mg was progressively raised to 1000 mg, without satisfactory control of the diabetes. Two-hour blood sugar levels ranged from 285 to 480 mg/100 ml, and all urine sugar levels were over 2%. In June of 1963 the patient was given chlorpromamide, 250 mg twice daily. Again two-hour postprandial sugar levels were elevated to 250 and 252 mg/100 ml, with glycosuria of 1 to 2%. In September, 1963, the patient was returned to a daily regimen of 10 units of NPH, and since then control has been excellent: normal fasting and postprandial sugar levels and no glycosuria.

Comment: Case 2 represents an excellent example of a patient who was in a state of poor control despite large doses of oral hypoglycemic agents, but who experienced excellent control of diabetes as well as improved stamina and strength while taking small daily doses of NPH insulin.

Case 3

A 48 year old white man was found to have diabetes at the age of 46 in 1961. The general physical findings were within normal limits, and the height was 68 inches, weight 121 pounds. He was treated with tolbutamide, 1 to 3 gm daily. Two-hour p.c. sugar levels ranged from 320 to 440 mg/100 ml, and all urine sugars were 2% or more. There was no ketonuria. In February, 1963, the patient was started on 10 units of NPH insulin given daily before breakfast. Since then all fasting blood sugar levels and one- to two-hour p.c. sugar levels have been within normal limits. The insulin dosage has been reduced progressively, and the patient is aglycosuric and normoglycemic at the present time while taking 3 units of NPH insulin daily. He has noted a marked increase in energy on this regimen. Without insulin, even the small dosage of 3 units, hyperglycemia develops.

Comment: Without the trial of oral hypoglycemic agents in this patient, it would seem that in the light of the small dosage of NPH insulin required, he might well be managed without insulin, or in fact with diet alone. That this supposition was not borne out must be emphasized by the response described above.

Case 4

A 39 year old Negro woman was admitted to Duke Hospital in December, 1962, with congestive heart failure secondary to idiopathic myocardial hypertrophy[1], at which time diabetes mellitus was found. Physical examination revealed cardiomegaly, hepatomegaly, bilateral pleural effusions, and anasarca. The fasting blood sugar was 619 mg/100 ml and the urine sugar 3.5%. On treatment with mercurial agents and digitalis, diuresis of 65 pounds was effected. The diabetes was initially treated with 3 to 6 gm of tolbuta-

mide for a three-week period. There was no response to therapy and the patient was given a daily dosage of 20 units of NPH insulin. She became normoglycemic, with fasting blood sugar ranging from 85 to 90 mg/100 ml and two-hour postprandial sugars from 128 to 165 mg/100 ml. After two months of insulin therapy the patient was given a trial of an experimental oral hypoglycemic agent of the sulfonylurea class. Dosage of this particular agent was large, ranging from 500 to 1000 mg per day. Again blood sugar levels were recorded as extremely high, and symptoms of diabetes returned. In April of 1963 the patient began taking 10 units of NPH insulin daily, and has been maintained on this dosage, with two-hour postprandial blood sugar levels ranging from 87 to 110 mg/100 ml. Cardiac compensation has been maintained, and her strength and stamina have improved.

Comment: This case again demonstrates successful response to a small daily dose of NPH insulin when oral hypoglycemic agents had strikingly failed to control diabetes.

Discussion

A selected group of patients with diabetes mellitus who require relatively small doses of insulin for excellent control, but who cannot be controlled by oral hypoglycemic agents of the sulfonylurea group, is the subject of this paper. This type of patient has been mentioned by O'Donovan[2], and figure 1 is reproduced from his paper.

Because of the simplicity of treatment with oral hypoglycemic agents, the tendency is to be content with unsatisfactory or even marginal control so long as the acute complications of ketoacidosis and coma are avoided. Although we have been impressed by the fact that patients who require small doses of insulin are more likely to respond than those requiring large doses, it must be emphasized that this is not always the case. It is well to look critically at what one calls responsiveness to oral hypoglycemic agents in order not to overlook those patients who would do much better on insulin. The criterion of successful treatment remains that of normoglycemic fasting and postprandial sugar levels and aglycosuria maintained in association with a full and nutritious diet.

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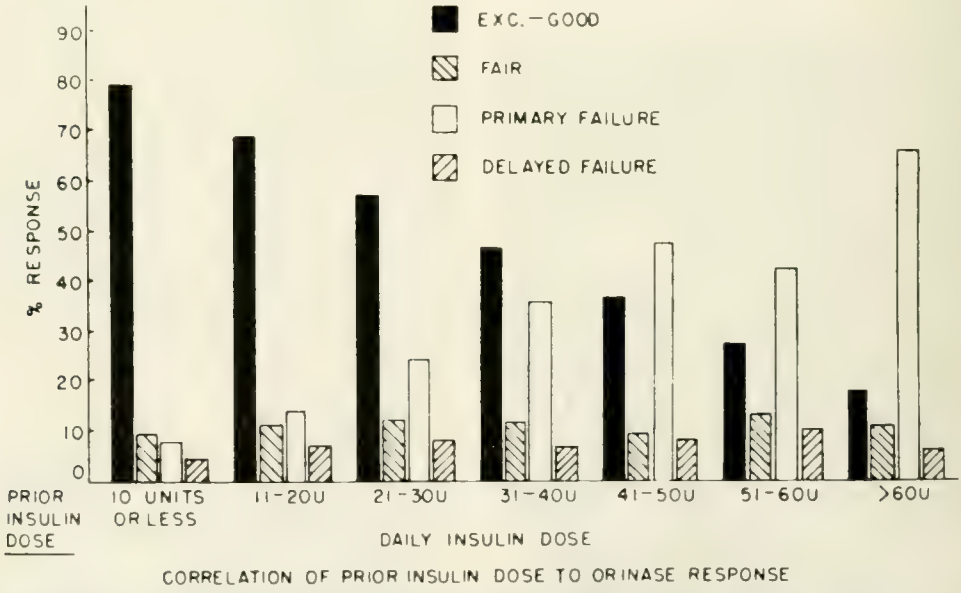


Fig. 1. According to O'Donovan (2) in his 2-year study of 9,168 collected cases of diabetes mellitus under treatment with tolbutamide, of patients requiring 10 units or less insulin daily, 7% failed to benefit from a trial or oral therapy, 9% achieved only fair control, and 4% experienced delayed failure.

Progress in the Management of Acute Cholecystitis

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For more than 30 years some degree of early surgical intervention has been widely accepted as the treatment of choice for acute cholecystitis. The degree of acceptance, however, has varied considerably. In the earlier part of this period, it was rather generally agreed that *if* the patient was seen, admitted, diagnosed, and adequately prepared for operation within 48 to 72 hours after the onset of symptoms, surgery was indicated. Otherwise, if the acute attack was more than three days old it was to be managed medically, with the hope that it would subside and that the patient would be readmitted a few weeks later for elective cholecystectomy, when—theoretically at least—the edema and acute reaction had subsided, making surgery easier and thereby safer.

In more recent years, many of us have felt the results from such a conservative approach have not been as good as might be obtained by operating as soon as the diagnosis of acute cholecystitis is made and the patient is adequately prepared, *regardless* of the number of hours or days since the onset of symptoms. The purpose of this paper is to support this view.

Evidence Favoring Early Surgical Treatment

In 1937 Heuer[1] reported a mortality of 2.1 per cent in cholecystectomy for uncomplicated acute cholecystitis and a mortality of 12.5 per cent when there was perforation. These rates are about three times as high as those in recent reports.

This improvement in mortality and a similar decrease in the nonfatal complication rate in the past 25 or 30 years has been due largely to better anesthesia, antibiotics, and laboratory facilities, but also in part, we believe, to an increasing use of early surgical treatment.

In the past few years most of the literature on acute cholecystitis strongly supports the more radical surgical approach. In 1963 Glenn and Thorbjarnarson[2] reported results of surgery for this condition in 1,130 patients at New York Hospital—Cornell Medical Center over a 29-year period. They found an overall mortality rate of 2.9 per cent, most of the deaths occurring in the elderly and in those late in getting to the surgeon. There was a 10.5 per cent mortality in cases too advanced for more than cholecystostomy, and a 50 per cent mortality in those requiring choledochostomy with cholecystostomy. They recommended that early operation be undertaken regardless of the patient's age and the duration of the condition.

Braasch and associates[3], in 1964, reported 324 cases of acute cholecystitis operated on over a 31-year period at the Lahey Clinic. Their mortality figures were 0.7 per cent for the uncomplicated case and 4.0 per cent for those with perforation. They also advised cholecystectomy "after a brief period of assessment and preparation" without regard to time interval from onset.

In 1959 Jones and colleagues[4], in a report of 180 cases of acute cholecystitis from Emory University Medical School, stated that the risk of late fibrosis, gangrene, and perforation in the medically treated cases is greater than the risk of early surgery in spite of the inflammatory edema encountered. They, too, feel that early surgery, unrestricted as to time lapse since the onset of symptoms, will reduce the mortality.

Hampson and others[5], in 1960, reported 305 cases of acute cholecystitis at Montreal General Hospital. Although more conservative, they stated that little is gained by waiting longer than necessary to let the patient rest and to confirm the diagnosis, the exception being the few patients with cardiac disease or some other serious condition.

Together with others, I also advise surgery for most patients with cardiac disease, diabetes, and the like, if and when those conditions can be satisfactorily brought under control. In some cases, of course, it may be deemed wise to limit the

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Table 1
Age Incidence

Age	No.	Per cent
29 - 39	21	25.9
40 - 59	30	37
60 - 82	30	37
Total	81	100

procedure to cholecystostomy—perhaps under local anesthesia.

McCubbrey and Thieme[6], the most conservative of recent authors, recommend medical management in all cases, and report 345 cases so treated at Ann Arbor. However, 191 of those patients were operated on either by choice or necessity before leaving the hospital; the mortality was 4.7 per cent. Of the 154 patients discharged, one third returned for surgery. Among the 191 patients operated on, there were 3 deaths in 159 cholecystectomies (1.9%) and 6 deaths in 32 cholecystostomies (18.7%). This is a high mortality unless we could be assured that the 102 patients who failed to return for surgery were permanently cured, which is very doubtful from other experience.

Medical "Failures"

From the literature and from this study it is apparent that a high percentage of the patients who are initially treated medically will eventually come to emergency operation when the inflammatory process and necrosis have progressed to a dangerous degree. In recent years, it is in this group of medical failures—particularly the late medical failures—that most deaths have occurred. By "medical failures" we mean those who on nonsurgical management fail to improve at all, and those who may improve initially but have an exacerbation either before or after discharge from the hospital—all requiring emergency operation at a late date and often under more hazardous circumstances.

Kessler and Reinus[7], in 1962, reported 331 cases of acute cholecystitis at Lenox Hill Hospital in New York City. They found that 86 of 229 patients (38%) initially treated medically ended in medical failure. These

Table 2
Sex Incidence

Sex	No.	Per cent
Male	35	43.2
Female	46	56.8
Total	81	100

86 cases required surgery under more adverse conditions than those present at the time of diagnosis. These authors also favored early surgery whatever the period after onset of symptoms.

Original Cases

Material for this study consisted of 81 cases of acute cholecystitis treated surgically at Charlotte Memorial Hospital. Fifty-two of these were consecutive patients, operations being performed in 1961, 1962 and 1963. Thirty-five of the 52 were private patients of 17 visiting surgeons, including the author; 17 were staff patients under supervision of the same group of surgeons. The remaining 29 were consecutive patients of the author's operated on at Memorial Hospital prior to 1961.

Incidence

Acute cholecystitis was found in approximately 25 per cent of all gallbladder operations at Memorial Hospital—a figure comparable to that noted in other studies. Glenn[1] found acute cholecystitis in 20 per cent of cases of nonmalignant gallbladder disease. Hampson and others[4] reported that about 25 per cent of the cases of cholecystitis at McGill were in the acute stage, while Vuori[8] in Finland reported an incidence of 38 per cent.

Table 1 shows the age incidence in this series to be comparable to that in other series; 74 per cent of the patients were over 40 and 37 per cent were over 60 years of age.

Table 2 confirms other reports that the condition is more common in females—56.8 per cent.

Symptoms and signs

Table 3 shows that the only consistent symptom was pain, the main complaint in all but one patient—an incidence of about 99 per cent. It was almost as frequent in the

epigastrium as in the right upper quadrant. Nausea, vomiting, or both, were the only other frequent symptoms, being present in 79 per cent of the patients. Thirty-eight per cent gave a history of chronic symptoms

Table 3
Symptoms—81 Cases

	No.	Per cent
Pain	80	99
Nausea	64	79
Prior chronic symptoms	31	38
Prior acute attacks	29	36

and another 36 per cent had previously experienced what may have been considered an acute attack, either in or out of the hospital—a total of 74 per cent with prior symptoms. Hampson found that 75 per cent of the patients in his series reported prior gallbladder symptoms. A few patients in the present series had mild diarrhea, not listed in the table.

The principal findings on physical examination are shown in Table 4. Tenderness was present in 95 per cent of the patients, usually in the right upper quadrant, but occasionally more prominant in the epigastrium. Fever of more than 0.5 of a degree was present preoperatively in 79 per cent. Guarding or rigidity was noted in 54 per cent, and a palpable mass in 23 per cent. Clinical jaundice was noted in only one case.

Table 4
Signs—81 Cases

	No.	Per cent
Tenderness	77	95
Fever	64	79
Rigidity	44	54
Mass	19	23

Laboratory findings of interest were limited to mild elevation in serum bilirubin and leukocytosis (Table 5-A). The highest preoperative white blood cell count was below 9,000, or considered normal, in 18 cases (22%). In 78 per cent of the cases, it was between 9,000 and 37,500, averaging 15,300. This again is a usual and significant finding. Jones and associates[4] found the white blood cell count below 8,000 in 22 per cent of their cases. These and other investigators frequently find gangrenous, acutely inflamed gallbladders in the absence of significant leukocytosis. A normal or near normal count can be misleading.

Table 5-B shows a high incidence of common duct stones when the direct serum bilirubin is over 3 mg/100 ml. Lesser degrees of elevation had little relationship to common duct stones.

Table 5-A
Laboratory Findings—81 Cases

Study	Range	No.	Per cent
Serum bilirubin	Normal	25	50
(Direct)—50 cases	0.5 - 5.0	25	50
White blood	Normal	18	22
cell count	Above 9,000 (Aver. 15,300)	63	78

Table 5-B
Relationship of Serum Bilirubin to Presence of Common Duct Stones

Serum Bilirubin (Direct) mg%	No. Cases	No. with C-D Stones	Per cent
Not determined	31	0	0
Normal (0-0.4)	25	2	8
0.5 - 3.0	19	3	15.7
3.0 - 5	6	4	66.6

Gallstones (Table 6) were found in 90 per cent of cases—leaving 10 per cent in the category of noncalculous acute cholecystitis. Common duct stones were found in 9 cases for an incidence of 11 per cent. They were present in only 60 per cent of patients having choledochostomy. Gallbladder stones were present in all patients with common duct stones.

X-ray studies were not made in 22 patients, some of whom had had positive findings previously. On a few patients who could not retain oral dye, intravenous cholecystograms were done. In 36 cases studied radiographically there was no visualization and no stone shadows. There was very poor visualization or none with stones in 8 cases. In another 7, positive stones were indicated by plain films. In 7 cases x-rays indicated a functioning gallbladder with

Table 6
Incidence of Stones

Total Cases	Gallbladder Stones Present	
	No.	Per cent
81	73	90
No. choledochostomies	**Common Duct Stones Present**	
	Per cent	**No.**
15	9	60

Table 7
Nonfatal Complications

	No. Cases		No. Cases
Pneumonitis	1	Myocardial infarction	1
Atelectasis	1	Fibrillation	2
Phlebothrombosis	1	Wound dehiscence	1
Jaundice	1	Gastroenteritis	1
Cholangitis	1	Parotitis	1
Residual common duct stone	1	Ileus	1
Protracted bile drainage	1	Mental disorientation	1
Post-cholecystectomy colic	1	Decubitus ulcer	1
Wound infection (E. Coli)	1	Total complications	18 (22%)

Table 8
Morbidity and Mortality in Relation to Time of Surgery

Days Onset to Surgery	No. Cases	Complications		Mortality	
		No.	Per cent	No.	Per cent
0 - 3	26	5	19.2	0	0
4 - 7	31	3	9.5	0	0
8 - 11	11	3	27.2	0	0
12 - 19	9	3	33.3	1	11.1
20 +	4	2	50	2	50
Total	81	16	19.7	3	3.7

stones, and one plain film indicated gas in the gallbladder.

The pathologist's opinion and the surgeon's clinical impression do not necessarily coincide in this condition. Braasch[3] points out that "an appreciable down-grading of the surgeon's diagnosis frequently occurs." He states that the surgeon's diagnosis is based upon the clinical course of the disease, correlated with the gross findings at celiotomy, and reflects more accurately the true picture of the disease. Several of our cases were diagnosed as "chronic" by the pathologists in spite of very typical, acute symptoms and signs—some with a preoperative leukocytosis of over 19,000.

Complications and mortality

Complications are listed in table 7. Sixteen patients had a total of 18 nonfatal complications—an incidence of 22 per cent, approximating the average in the larger series reported.

Table 8 shows the incidence of complications and mortality as related to the time of operation. The highest rate of complications is in the group of late medical failures. There was no mortality in patients operated on within 18 days of the onset of symptoms, and 50 of these were operated on after the three-day limit.

It is interesting to note from the figures in this series that patients operated on between four and seven days after onset had a much lower incidence of complications than those operated on within the first three days. This was a small series of cases and no explanation for this finding is apparent.

Table 9
Morbidity and Mortality
in Relation to Operative Procedure

Operation	Cases		Significant Complications		Postoperative Mortality	
	No.	Per cent	No.	Per cent	No.	Per cent
Cholecystectomy	59	72.7	8	13.5	1	1.7
Cholecystectomy and Choledochostomy	15	18.5	4	26.6	1	6.6
Cholecystostomy	7	8.6	4	57	1	14.3
Total	81		16	18.7	3	3.7

However, it strongly supports the contention that the patient with an "acute gallbladder" is not a poor surgical risk because symptoms have been present more than 48 to 72 hours.

There were three deaths in this series, for a mortality of 3.7 per cent. All three occurred in patients over 50 years of age. Two of the three were definite late medical failures —each being managed medically for more than four weeks before emergency operation was done. The third patient who died was also in very poor condition, having a pericholecystic abscess at the time of operation, due to long delay in diagnosing an atypical case of acute cholecystitis developing in the hospital after an operation for varicose veins.

Discussion

From this study and a review of the literature we can make the following observations:

1. The highest complication rate and almost all mortality in surgery for acute cholecystitis are found in the late medical failures and in the older age group. Early surgery demands early hospitalization and early recognition of the disease.

2. A careful history with particular attention to previous acute or chronic gallbladder symptoms, coupled with a careful evaluation of physical findings in right upper quadrant, is most important in making an early diagnosis.

3. X-ray, particularly intravenous cholangiography as used routinely by Harrington and DeBakey, may be helpful.

4. Positive laboratory findings, although helpful when present, should not be considered essential to the diagnosis and the decision to operate when the symptoms and physical findings are typical. Gangrene and perforation have occurred in patients, particularly in elderly ones, who did not have significant fever or leukocytosis.

5. The important choice of operative procedure is a matter of surgical judgment. Table 9 shows the complication rate and mortality as related to the procedure in this series. Since choledochostomy carries a higher rate of morbidity and mortality than cholecystectomy alone, the common duct should be explored only on fairly definite indications. A very slight elevation in direct serum bilirubin, for example, up to 2 or possibly 3 mg./100 ml., should not in itself be considered an indication for exploration of the common duct.

6. A high morbidity and mortality in cholecystostomy is expected, since this procedure is indicated in the occasional medical failure who is a poor risk for surgery. In better risk patients, however, cholecystostomy is a less desirable procedure, since infected gangrenous tissue is left in the patient, adding to the possible causes of morbidity and mortality. Earlier diagnosis and earlier surgical intervention will greatly decrease the need to even consider this procedure. In cases which do come to surgery late, it is felt that with proper anesthesia, adequate exposure, and surgical assistance with careful surgical technique, the gangrenous gallbladder can usually be removed with less risk to the patient than simply

draining it would entail. Welch[9] reports the removal of 100 consecutive acute gallbladders from above downward without a death. He rarely does a cholecystostomy.

Conclusion

Although morbidity and mortality in acute cholecystitis have decreased in the past 30 years, a still lower morbidity and an almost nonexistent mortality should be realized if the patient is promptly hospitalized and diagnosed, then adequately prepared and operated on as early as possible without regard to the three-day limitation. The risk of this form of early operation is less than that of medical failure with its high rate of morbidity and mortality.

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. . . . .the medical profession, the richest profession in point of average earned income per member, cuts a poor figure as a beggar to laymen when its members received at least one third and often two thirds of the costs of their medical education without paying while in school or later. If each doctor now in practice would send back to his medical school $100 a year, we should have $20,000,000 yearly for medical education instead of the pitiable response thus far obtained by the National Fund for Medical Education . . . . I warn you in tones that are neither shrill nor strident that the members of the medical profession should begin to pay back what they received from endowments, gifts, and public taxation and that laymen should be made aware, too, of the price they will pay if medical schools cannot train doctors as they know how to train them.—Alan Gregg in *Challenges to Contemporary Medicine*, Columbia University Press, 1956, pp. 74-75.

Eaton Agent Pneumonia: Current Status

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The recognition of pneumonia as a disease entity dates to the medical ancients; yet its diagnosis and treatment, like that of nearly every disease process, is still an unfinished chapter.

Before the advent of antibiotics, pneumonia was considered to be almost exclusively pneumonococcal[1]. The interstitial pneumonia described as early as 1961 by Bertels received little more than comment[2].

During the influenza pandemic of 1892. Pfeiffer called attention to a bacterium, *Hemophilus influenzae*, isolated from the throats and sputum of a number of cases and considered the agent responsible for the pneumonic process[3]. However, with further studies in the wake of the pandemic of 1918-1919, doubt was rapidly cast on the role of *H. influenzae* in influenzal pneumonia, even though the viral etiology was not established until 1933 by Smith and assocates, and rapidly confirmed by others[4].

Nonbacterial Pneumonia—Entity or Syndrome?

With improvement in roentgenographic techniques and increasing use of x-ray in clinical diagnosis came a growing recognition of a form of pneumonia clinically different from the classic pneumococcal form. Evidence of pulmonary involvement in measles, using x-ray studies, was reported in 1929 by Kohn and Koiransky[5]. Arrasmith[6] selected 95 cases of pneumonia occurring in an influenza epidemic and discussed an entity he designated as influenza pneumonia, remarking on the marked clinical differences seen in the bronchopneumonias. Gallagher[7], in 1934, collected a series of 16 cases of "bronchopneumonia," using the term in the sense of acute pulmonary infection of unknown etiology, presenting a clinical picture of malaise and ill defined physical signs. No attempts were made to isolate a virus.

Bacterial cultures were "of little significance," since sputum was scanty. Gallagher remarked on the contrast of scanty physical signs and the pronounced x-ray findings. Allen[8], in reviewing army experience in 50 cases of nonbacterial pneumonia, proposed classification of an entity, acute pneumonitis, considered it a roentgenographic diagnosis, and hypothesized a viral origin. In an excellent paper, McCordock and Muckenfuss[9], drawing on experience with the 1918-1919 pandemic, compared the pathologic findings in 50 cases of influenza, 25 cases of measles, and 40 cases of whooping cough. The authors re-emphasized the interstitial nature of the pneumonic process, and they were able to produce similar changes in animals by inducing a penumonia with vaccinia virus. By 1935 the viral etiology of certain pneumonic processes was generally accepted, although agents other than the influenza virus had not been demonstrated. With the development of antibiotics at this time, the syndrome gained in importance and relative frequency.

Riemann[10], in 1938, reported 8 cases which he considered as representing a clinical entity because the signs and symptoms were uniform. The etiology was undetermined. Although he was able to isolate a virus in 2 of the cases, the significance of these isolations was unresolved at the time of reporting. Later attempts at passage of this agent (s) were unsuccessful, and these agents were lost. Apparently, he was the first to use the term atypical pneumonia.

Smiley[11] reported 86 cases observed from 1937 to 1939 and classified them into three types according to severity. He stressed the roentgenographic findings and considered his most severe cases identical with those reported by Reimann. He advocated the descriptive title of acute interstitial pneumonia, and hypothesized a vital etiology of this apparently new syndrome. In England, Scadding[12] and Gill[13] reported similar cases. Brock[14] reported 52 cases of pneumonia in a series of 1,667 cases of upper respiratory

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infections. Of these only 6 were bacterial in origin.

In 1942 a directive from the Surgeon General of the United States[15] described the syndrome referred to above as a nonbacterial pneumonia with disparity in onset of signs and symptoms, normal white blood cell count, and characteristic roentgenographic appearance. Military cases were to be reported as primary atypical pneumonia, etiology unknown.

At this time, the literature on viral pneumonias was reviewed by Dingle and Finland[16], who were of the opinion that primary atypical pneumonia (PAP) represented a syndrome rather than a single disease. This opinion echoed the general feeling at that time. They remarked that even though it was considered a syndrome, there was no single criterion which characterized it, and they felt that without specific etiologic diagnosis, the clinical and epidemiologic pattern could not be delineated. The diagnosis of primary atypical pneumonia at this time was based on the elimination of the known agents which might produce a similar clinical pattern; that is, failure to find an agent was an essential to diagnosis.

Search for an Etiologic Agent

By 1945 many large series had been reported. Most extensive and impressive of these was a study of 69 cases by Dingle and others undertaken at Camp Clairborne, Louisiana[17]. To these, 216 cases from the hospital records were added, giving extensive clinical and laboratory data. Others reported similar findings [18-20]. The syndrome had become well established.

In 1942 Eaton and others[21] isolated an organism associated with PAP; but because of difficulty in transmission, the presence of latent infection in the experimental animal used (cotton rats), and the lack of a good serologic test for infection, it did not receive generalized acceptance.

In an excellent and extensive review, Riemann[22], in 1947, was able to present a list of agents which had been isolated. About 25 filterable agents had been reported, including those of the psittacosis group; but few save the latter had been generally accepted as related to the syndrome. Although not willing to accept Eaton's organism as definitely associated with the syndrome, Riemann felt it worthy of further study.

In further studies from Eaton's laboratory[23], the agent was transmitted to chick embryos by inoculation into the amnion. Three strains were adapted by passage. Suspensions of these chick embryo cultures, bacteriologically sterile when inoculated onto the routine media, produced pulmonary lesions in cotton rats similar to those produced by direct intranasal inoculation with sputum or lung tissue from patients with the syndrome. Pulmonary lesions in the experimental animal were reduced when the suspension was exposed to convalescent serum. Acute phase serum did not reduce the infectivity of the suspension. Because of latent viral infection in the cotton rats by the pulmonary virus of mice (PVM) as described by Horsfall[24], these results were not considered conclusive.

Eaton's group[25] reported further evidence that the pulmonary lesions produced in rats and hamsters were due to the agent propagated in the chick embryos, and were not a manifestation of latent virus infection in the animal population. Filtration studies showed a particle size of 180-250 millimicrons. Again using the cotton rat as an indicator system, and considering the role of PVM in the experimental design, they studied 69 cases with the clinical diagnosis of PAP[26].

A fourfold rise in neutralizing antibodies was demonstrated in 42 cases (61%). In 7 cases the results were doubtful because either the acute phase serum was obtained later than 10 days after the onset of the illness and the titer was high in both specimens, or because the rise observed was less than fourfold. Nine patients were shown to have Type A influenza by antibody titer, and the virus was isolated from the throat washings of 7. None of the controls with bacterial pneumonia showed a rise in titer. However, chick embryo neutralization studies gave irregular results; neutralization with convalescent serum did not always occur. Because of this irregularity the study was considered inconclusive since the evidence did not rule out neutralization as a antitoxic effect. About half the subjects with

Table 1

Diagnosis	No. Tested	Neutralizing Antibody Response		
		Decrease or No Change	Twofold Rise	Fourfold Rise or Greater
PAP	84	22	10	52 (61.9%)
Bacterial	25	23	2	0 (0%)
Other viral				
URI not influenza A, B	77	59	3	15 (19.5%)
URI	27	26	0	1 (3.7%)
Influenza A				
Total	213	130 (61%)	15 (7%)	69 (32%)

Table 2

Cold agglutinin	No.	Virus Neutralizing Antibody Increase		
		None	Twofold Rise	Fourfold Rise and Greater
Positive	28	4	3	21 (75%)
Twofold increase				
Negative	26	9	5	12 (46%)
Total	54	13 (24%)	8 (15%)	33 (61%)

Table 3

	Clinical Diagnosis	No. Tested	No. Positive
Cold agglutinins	PAP	801	454 (56.7%)
	Other diseases	1719	75 (4.4%)
	Normal	209	17 (8.1%)
Streptococcus MG agglutinins	PAP	669	294 (44.0%)
	Other diseases	568	23 (4.0%)
	Normal	375	19 (5.3%)

a fourfold rise in neutralizing antibody showed an increase in cold agglutinins.

The results of further studies on 213 paired sera are shown in Table 1 for comparison with later studies[27]. Cold agglutinin response in some of these patients is shown in Table 2. The authors concluded that if a positive neutralization test is an indication of etiology, the atypical pneumonia virus (AP), as Eaton named it, could be considered the causative agent in at least four localized epidemics of acute respiratory illness in 1941 and 1942. In the more sporadic type of respiratory disease, there was evidence of a more diverse etiology.

At the same time, other directions of clinical investigation were being followed and less cumbersome serologic tests of questioned significance, cold agglutinins and Streptococcus MG agglutinins, were investigated[28-30]. Horsfall[31], discussing PAP in 1947, tabulated some of the results reported in the literature. These are noted in Table 3. It was apparent that these serologic reactions were of a nonspecific nature, and their relationship to PAP would have to await establishment of the etiology. That the causative agent was filterable was well established by the Commission on Acute Respiratory Diseases[32].

The state of knowledge concerning PAP remained static until a major breakthrough was made in 1957 by Liu[33]. Using a fluorescein-labeled antibody (FA) technique, he was able to detect an antigen in the lung tissue of chick embryos infected using Eaton's culture method. With FA techniques he was able to tag the organism, or some antigen produced by the organism, which had been isolated in 1944 and carried in chick embroys by Eaton, as well as eight new strains which had been isolated in New England between 1954 and 1956. One of these later was recovered from lung tissue frozen since 1943. Antisera to the different isolates could be used to tag each isolate. Specific tagging did

Table 4

Study Group	Total No.	Positive Rise in Eaton Agent Antibody
Exeter, prep-school epidemic paired sera	38	35 * (92%)
Boston-Cambridge sporadic cases paired sera	39	20 * (67%)
Boston-Cambridge sporadic cases single serum 3rd week of illness	21	14 ** (67%)

* four-fold rise
** titer greater than 1/10

not occur when human psittacosis immune serum, rabbit psittacosis immune serum, human Q fever immune serum, rabbit Q fever immune serum, human APC (later designated adenovirus) types 1 to 6 immune serum, human influenza types A and B immune serum, and rabbit PVM immune serum was applied to the chick embryo tissue.

In later studies using FA techniques, Liu, Eaton, and Hey[34] studied the relationship of the antibody in 89 patients with nonbacterial pneumonia. Results are shown in Table 4. Longitudinal studies showed the antibody still to be detectable, although in lower amounts, 12 to 18 months after the illness. Cold agglutinin studies were done on 31 patients with a significant FA titer, and of these 28 (90.3 per cent) were positive. Correlation for Streptococcus MG agglutinins were demonstrated in only 30 per cent of the individuals. Cross absorption studies showed that there was no relationship between the cold agglutinins, Streptococcus MG agglutinins, and the antibody demonstrated by the FA technique. A parallel rise of the FA antibody and the neutralizing antibody, demonstrable in the cotton rat system, was demonstrated in the sera of 9 patients studied in this way.

With this more reliable method of determining rise in antibody titer, some of the futher clinical studies of respiratory illnesses included a search for Eaton's agent. Results of these studies, as well as cold agglutinin correlation where done, are shown in Table 5. As can be seen, an increase in antibody against the Eaton agent was found in a significant number of cases. It is evident, however, that the Eaton agent certainly is not the only agent responsible for all the cases of PAP which remain after the other commonly known viruses have been excluded.

Since the epidemics reported between 1940 and 1945, large epidemics of PAP apparently have not occurred until recently[41]. In 1959-1960, a good opportunity to study PAP was presented by an epidemic among recruits at Parris Island, South Carolina. The epidemic has been studied extensively both clinically and in the laboratory, and represents the largest group of patients studied by means of FA technique to determine the role of Eaton's agent. A list of the signs and symptoms recorded in this study appears in Tables 6 and 7[42]. As can be seen, Eaton agent pneumonia is not a clinically separable disease, but represents another agent which can produce the atypical pneumonia syndrome. When the responsible agent is determined, the process can no longer be called PAP but must be designated a pneumonia caused by a specific etiologic agent, that is, Eaton agent pneumonia or adenovirus pneumonia.

Relation to Pleuropneumonia-like Organisms

In the early studies of PAP, reports concerning the efficacy of antibotics were conflicting. Eaton and his associates had studied the effects of various antibiotics on the agent they had isolated. Because of the antibiotic sensitivity and the size of the infecting organism, they hypothesized that the filterable agent might be a member of the group of pleuropneumonia-like organisms (PPLO)[43].

The plueropneumonia-like organisms are a group of poorly defined organisms in relationship to the rest of the microbiologic world. Bergey's classification (seventh edition, 1957) puts them in the order— *Mycoplasmatoles,* family — *Mycoplasmatocea,* and genus — *Mycoplasma.* Species is based on source of isolation. As a group they are characterized by ability to grow on cell-free media with the development of pleomorphic structure, minimum reproductive size of 125-250 milli-microns, the development of typ-

ical colonies with a fried egg appearance, 10-20 micra and as a rule not larger than 600 micra when grown on solid media, and nutrient requirements which are presently poorly understood. Their relationship to bacteria, especially the L-forms of some bacterial organisms, is still a matter of dispute. Their relationship to animal disease is well established, but their role in human disease is poorly understood at this time. Saprophytic forms exist. Recent studies have shown them to be found rather frequently as a contaminant of tissue cultures without producing cytopathic effects. The interested reader is referred to the bibliography for recent reviews.

In spite of their suspicion, Eaton's group was repeatedly unable to obtain growth on cell-free media. This led them to suggest that the organism might represent a variant of a PPLO which required an intracellular environment for growth[43]. However, in general the agent was considered to be a virus.

Marmion and Goodburn[44] also suspected the PPLO nature of the organism because of susceptibility to gold salts. In additional

Table 5

Study	Source and No. Cases	Percent Cases Etiology Determined	Percent. Cases Rise in FA Titer	EA+ EA+	CA+ CA+
Chanock et al. 1960 (35)	Lower tract infection; 152 infants; sporadic cases	59	16.4	Not done	
Cook et al. 1960 (36)	CA and/or Strep MG + pneumonias; 26 sporadic, widely distributed cases	84.6 others besides EA tested for	84.6	18/26 69.6%	—
Kingston et al. 1961 (37)	Marine recruits; 290 pneumonia pts.	133 EA+ 157 EA−	46.3	62/133 47.7%	11/157 7.0%
Evans 1961 (38)	119 college students; infirmary admissions for resp. illness	44.3	24.4	12/22 54.5%	23/52 44.2%
Chanock et al. 1961 (39)	Volunteer transmission study; 57 volunteers	27/57 with prior FA level less than 1/10 16/27 with feb. illness	100	11/16* 68.8%	—
		25 25/57 with prior FA level greater than 1/10 1/25 with feb. illness	68	0/1* 0%	—
Clyde et al. 1961 (40)	Reevaluation of Commission studies (32) Saved sera tested using FA technique	59 volunteers 17 autoclaved inoc. 22 filtered inoc. 20 unfiltered inoc.	**23.5 68.2 65.0	15/28 53.6%	—

CA—Cold agglutinin
EA—Eaton agent

* Febrile illness
** Break in technique

Table 6

Symptom	Eaton Agent		Adenovirus		Unknown Etiology	
	No.	Per Cent	No.	Per Cent	No.	Per Cent
Cough	101	93	21	91	118	97
Headache	92	84	10	43	72	59
Chills	88	78	15	65	88	72
Malaise	81	74	13	57	60	49
Sore Throat	58	53	15	65	60	49
Nasal sympts.	53	49	18	78	100	82
Generalized aches	49	45	11	48	60	49
Chest pain	46	42	10	57	69	56
Anorexia	36	36	4	17	33	27
Total	109		23		122	

Table 7

Sign	Eaton Agent		Adenovirus		Unknown Etiology	
	No.	Per Cent	No.	Per Cent	No.	Per Cent
Fever	109	100	23	100	122	100
Positive x-ray	109	100	23	100	122	100
Rales	92	85	14	61	89	73
Pharyngeal lymph nodes	27	25	4	17	13	11
Cervical adenopathy	20	18	6	26	20	16
Pharyngeal edema	13	12	10	43	10	8
Tonsil exudate	1	0.9	4	17	1	0.8

studies[45], they were able to demonstrate objects which they called elementary bodies on the bronchial mucosa of chick embryo lungs infected with Eaton's agent by using an intensified form of Giemsa's method of staining. The elementary bodies correspond in position to the site of localization of the fluorscein-labeled antigen previously described. However, they were not able to produce growth on a cell-free medium.

These findings stimulated Chanock, Hayflick and Barile[46] to attempt cultivation of a PPLO to identify Eaton's agent further. The initial isolation of a PPLO was made from monkey kidney tissue culture passage fluid containing 10^4 egg infective doses per 0.1 ml[47]. By repeated passage in cell-free media, then titration in chick embryos using the FA technique, they were able to demonstrate multiplication. Tests of the agent using neutralization techniques with the acute and convalescent serum from patients with Eaton agent pneumonia showed that this was the same organism. Although some of the colonies on the solid media showed the typical fried egg appearance of PPLO, most exhibited a homogenous granularity. This has been observed with other human strains of PPLO (personal experience). They found that horse serum and yeast extract were essential for growth. Colonies transferred from agar to glass slides could be tagged using fluorescein-labeled convalescent Eaton pneumonia serum, but no reaction was seen when acute phase serum, adenovirus convalescent serum, parainfluenza convalescent serum, or Q fever convalescent serum was used. The colonies on agar were also tested with rabbit antisera to the Mac strain of Eaton's agent, the strain originally isolated by Eaton, and were positive. Negative reactions were obtained when human genital, bovine, rat, or sewage strains of PPLO were tested with the rabbit antiserum.

The relationship of Eaton's agent to other PPLO was further investigated. Three human oral, four human genital, one bovine genital, one rat, two avian, five tissue culture, and one sewage strain of PPLO were tested using both hyperimmune rabbit serum (except human oral), and high titer human convalescent serum. In comparison to the 1/40 titer with hyperimmune serum and the 1/80 to 1/160 with the human convalescent serum, the control showed negligible reaction, mostly less than 1/10. Passage was

done in antibiotic free media to rule out an L-form of bacteria[46].

It is not surprising that growth of Eaton's agent on cell-free media has been so difficult to demonstrate. Workers experienced with PPLO study report unexplained growth failures even in lines which they have been carrying for many passages[48].

Although initially unsuccessful in maintaining Eaton's agent in cell-free media, Goodburn and Marmion[49] recently, reported that they were able to recover Eaton's organism from PPLO medium after incubation for 12 days at 37 degrees C. Although they could not demonstrate unequivocal evidence of multiplication, the survival time was substantially increased over the environmental survival time reported by Eaton[25].

The properties of Eaton's agent gleaned from the above studies may now be summarized. The agent produces PPLO colonies on agar supplemented with yeast extract and horse serum. Filtration studies give an estimated size of 180 to 250 milli-microns. The colonies can be specifically strained by the FA technique. Growth can be demonstrated in some lines of tissue culture. There is no cytopathic effect, but the organism is demonstrable in tissue culture using the FA technique. No reversion to, or demonstration of, an L-form has yet been reported. No antigenic relationship to the other PPLO has been demonstrated. The organism shows irregular sensitivity to streptomycin and is sensitive to chlortetracycline and demethylchlortetracycline *in vivo* and in *in vitro*. There is sensitivity to gold salts *in vitro* and *in vivo*. Knowledge of the organism is largely dependent upon further understanding of the whole group of pleuropneumonia-like organisms.

Clinical Significance

With development of more specific methods of demonstrating infection by the organism, a considerable amount of clinical data has been accumulated. We know that Eaton's agent gives rise to illness which is not clinically separate from other nonbacterial respiratory illnesses, and which produces a spectrum of illness from upper respiratory illness to pneumonia. Experimentally, the organism has also been linked with a bullous myringitis. The organism can be associated with both sporadic as well as epidemic outbreaks, is wide in distribution, and is disseminated slowly. The host range is from infants to adults, and infection most commonly occurs in young adults.

Infection carries a low risk of pneumonia, (infection-pneumonia ratio, 30:1). The incubation period is about 14 days. A cold agglutinin titer rise is demonstrable in about 50% of the FA-positive Eaton pneumonias, but this figure apparently increases with the severity of the illness. The FA antibody appears to provide protection, and the occurrence of significant levels is dependent on the age and the population group studied; it is found in 15 to 20 per cent of young adults. Treatment with demethylchlortetracycline attentuates the duration of symptoms and x-ray and clinical findings when studied under double blind conditions. All of Koch's postulates have been fulfilled. Although a significant number of primary atypical pneumonias are due to the Eaton agent, a large group remains whose etiology is unknown.

The discovery of Eaton agent pneumonia has made a significant decrease in the number of illnesses described as primary atypical pneumonia, etiology unknown. Such a diagnosis can be excluded, however, only with elaborate and extensive laboratory study. As a result, the etiologic diagnosis is of little help to the practicing physician, since diagnosis comes only after recovery or in late convalescence from the disease. Nevertheless, etiologic diagnosis has become even more important now that it has definitely been established that a significant number of the primary atypical pneumonias (Eaton agent group) will respond to antibiotic therapy. The clinician's only recourse is to treat each case with a course of broad spectrum antibiotics in the hope of eliciting a response.

Since the clinical course is quite variable, a response to therapy probably could not be considered diagnostic in many cases. The dilemma of blind treatment of upper respiratory illness remains unresolved. Studies of a double blind nature have not been done in reference to Eaton URI, but because of the benign nature and the short duration of the illness, symptomatic treatment would appear

to be the treatment of choice.

The problems involved in cultivating members of the PPLO group of organisms and the further studies for identification after culture militate against this method as a clinical diagnostic tool. Growth would take four to six days, and additional serologic testing would be necessary. If throat and sputum cultures were used, the problems involved in bacterial overgrowth would be added. Studies demonstrating the organism in throat washings and sputum samples directly by FA methods would be interesting, ing, but because of the technical complexity and the necessarily high cost of such procedures, they certainly would not prove a very useful clinical tool even if shown to be effective.

Information gained concerning the role of Eaton's agent and the double blind antibiotic study done at Parris Island have at least given a rationale for antibiotic therapy in primary atypical pneumonia. Because of the significance of Eaton's agent as a cause of atypical pneumonia, the possible development of a vaccine should be considered. Although the incidence of pneumonia in association with infection by Eaton's agent seems to be low, the vaccine potential becomes more important when one considers the conditions under which epidemics appear, so well demonstrated by the Parris Island study and the military camp studies of World War II. With vaccination of selected groups, a substantial man-hour loss might have been avoided.

Conclusion

The discovery of Eaton agent has not only added to our knowledge of the nonbacterial pneumonia but will probably have a stimulating effect on the study of a strange and poorly understood group of organisms—the PPLO.

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Research is like roulette. The bank, or the house, is society with its body of established knowledge, and over the long run the house will win. A single turn of the wheel, a single research project, may win nothing. But the house's apparently small advantage brings the aggregate of many gambles to certain profit . . . . 'Since chance, as has long been observed, has neither memory nor conscience, you can't count on research to be conscientiously responsive or otherwise mindful of the fact that you've been putting down money on research now for quite a while. Lady Luck never feels obliged to smile.—Alan Gregg in *Challenges to Contemporary Medicine,* Columbia University Press, 1956, p. 70.

Diagnostic Radiology in the Community Hospital

Departmental Problems and Procedures

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Lumberton

The problems of the radiologist in any given area are conditioned by numerous variables. The size of the community, its geography, the cultural level and material wealth of its citizens, the nature of the underlying economy, the availability of trained personnel, the training and special interests of the radiologist himself—all represent threads in the complex texture of radiologic practice.

It is evident that the expression "community hospital" is a term with a broad semantic range, and that the problems of the radiologist in urban centers like Charlotte or Greensboro will differ from those of the radiologist in the hinterlands. Nevertheless, it is hoped that my comments here, based on 15 years' experience as a radiologist in Lumberton, will bring into focus some of the major problems faced by radiologists in various types of community hospitals.

Background

Lumberton, Robeson County's largest city and its county seat, has a population of about 20,000, but the hospital serves as a medical center for more than 100,000 people in the surrounding smaller towns and rural communities. It is geographically remote from the larger urban and medical centers in the state—125 miles from Charlotte, 115 miles from Durham and Chapel Hill, and 150 miles from Winston-Salem.

The economy of this region is mainly agrarian, tobacco and cotton representing the so-called "money" crops, and tenant farming is the sole means of support for a large segment of the rural population. Although greater diversification of crops and the acquisition of several small industries in recent years have tended to broaden the economic base, this area is still economically depressed, and the per capita income is near the lowest in the state (Table 1).

Table 1
Average Per Capita Income—1962

State of North Carolina as a whole	$1,732.00
Mecklenburg County	2,461.00
Wake County	2,155.00
Robeson County	1,105.00

A formidable soicologic problem is the presence of three racial groups in this area in about equal representation: white, Indian, and Negro. A high percentage of illiteracy and school dropouts prevails.

Our hospital is a voluntary, nonprofit, general hospital of 265 beds. It was constructed under the Hill-Burton Act and was dedicated in 1953 as the Robeson County Memorial Hospital, having evolved from the merger of two private hospitals. When first dedicated, the hospital had only 160 beds, but has undergone several phases of expansion since then, all supported by Hill-Burton funds. In 1959, because of the growing reputation of the hospital as a medical center for the southeastern part of the state as well as for adjacent areas in South Carolina, its name was changed to "Southeastern General Hospital."

The medical staff at present consists of 40 active members distributed by type of practice and board certifications as listed in Table 2.

Table 2
Distribution of Medical Staff

Type of Practice	No.	Board Certified or Eligible
General Surgery	4	4
Internal Medicine	5	5
Pediatrics	2	2
Orthopedics	2	1
Urology	3	2
Obstetrics and Gynecology	4	3
Pathology	2	2
Radiology	2	2
General Practice	16	
Total	40	21

Read before the Section on Radiology, Medical Society of the State of North Carolina, Greensboro, May, 1964.

From The Southeastern General Hospital, Lumberton, North Carolina.

The x-ray department is staffed by two radiologists, four registered technicians, six students, one dark room aide, and one secretary.

Table 3 indicates the number and distribution of diagnostic x-ray examinations performed at the Southeastern General Hospital in the calendar year of 1963.

Table 3
Number and Distribution of Diagnostic X-Ray Procedures

Type of Examination	No.
Bones (extremities, skull, spine, ribs)	5,346
Chest	4,846
Kidney, ureter, and bladder	1,215
Upper gastrointestinal tract	1,257
Small bowel	37
Colon	552
Esophagus	57
Gallbladder	817
Cholangiograms	71
Genitourinary tract	1,000
Obstetric	43
Myelograms	22
Bronchograms	3
Arteriograms	26
Laminograms	3
Miscellaneous	11
Total	15,306

A total of 15,306 examinations was performed on 12,781 patients, representing an 89 per cent increase in the number of examinations since 1954 (Table 4).

Table 4
Utilization of X-Ray Examinations

Year	Total Patients	Total Examinations	Total Films	Film Patient Ratio
1952	6,944	8,085	16,496	2.38
1963	12,781	15,306	42,240	3.30
Percent. increase	84.0	89.3	156.0	

Our figures reflect the trend of increased x-ray utilization in the past decade,[1, 2] as well as the increased number of examinations per patient. The percentage of gain in our hospital exceeds the figures furnished by McGibony[1], who cites a 33 per cent increase in 500-bed hospitals to 75 per cent in 50-bed hospitals in the decade 1953-1962.

The Problems

Equipment and space

Perhaps our greatest problem has been insufficient equipment and space. We have only two large fixed installations (radiographic-fluoroscopic) of 300 milliampere capacity to provide x-ray service for 265 beds. Our other equipment consists of one cystoscopic unit and two mobile units, one of which is of World War II army surplus vintage. The other is a recent acquisition purchased as a stopgap measure to cope with our rising patient load, and is utilized in a cast room near the x-ray department in combination with a cheap second-hand table as a 200 milliampere stationary unit during the busy morning hours. We are, however, subject to summary ejection from this room by the surgeon or orthopedist requiring its use.

We have no automatic processing equipment, and our darkroom often becomes an annoying bottleneck. To compound our problem of traffic congestion, a main hospital corridor leading to the outside runs the length of our department.

Although plans for a major expansion of the department to provide service for a proposed maximum of 320 beds have been in preparation and virtually completed for more than two years, and have received the approval of the North Carolina Medical Care Commission, these plans cannot be implemented without financial assistance from federal and state agencies. The bureaucratic mills grind slowly, and it may be two years or more before these plans become a reality.

Dependence on federal funds has, in several instances, been self-defeating, since there has been a tendency to defer the purchase of items of desperately needed equipment in the hope that the x-ray department would "get by" until matching funds would become available as part of a proposed expansion program.

Although many institutions utilize a sinking fund derived from receipts from the x-ray department to replace old and to purchase new equipment, this policy has not been adopted in our hospital, since the administration is of the opinion that any income from the department should go into the general hospital fund and be allocated where needed on a system of relative priorities.

Special procedures

Related to the problem of space and equipment is the role of special procedures in a community hospital like ours. As indicated in Table 3, the number of special procedures performed in our hospital is small. Only excretory urography, which Pendergrass and St. Aubin[2] consider a special procedure, in accordance with their definition "as the actual percutaneous puncture, or cut-down, and injection of contrast material by the radiologist," is performed with any degree of frequency, comprising about 6 per cent of all x-ray examinations.

The bewildering array of newer diagnostic x-ray techniques, mainly in the field of vascular radiology, presents a considerable challenge to the general practitioner of radiology in the small community hospital. These procedures are expensive in terms of equipment, space, personnel, and time. At this stage, the radiologist in the smaller community hospital can best fulfill his role by expanding his proficiency in the bread-and-butter procedures, rather than by diluting his skills in áttempting to be an "occasional arteriographer."[3]

He can still utilize many of the concepts derived from the newer techniques in vascular radiology and apply them in his daily routine. Thus, in the light of the newer knowledge of pulmonary hemodynamics, a hitherto unexplained shadow on the plain film of the chest can be definitely identified.

In any event, he must realize that many of the new angiographic techniques will eventually be standardized and become routine procedures even in the community hospital, as trained personnel becomes available, and as the cost of the required equipment is reduced through widespread usage.

Personnel problems

Virtually all our technicians are homegrown products of our own x-ray school. This was established with the primary purpose of training and maintaining a pool of available technical personnel with roots in this area. Our experience with technicians from afar had not been satisfactory, because of our comparatively low salary scale and limited facilities for recreation and entertainment. Those who did come from more metropolitian areas had only a transitory interest in remaining.

Our school, which was originally initiated on an informal apprenticeship basis, was formally accredited in 1961 for the requisite two-year course. We train three students in each class and accept qualified applicants of both sexes. Although the establishment of the school has helped to solve the problem of technical personnel, its maintenance carries with it serious obligations and imposes added duties on the radiologists and regular technical staff. At least 120 hours of didactic teaching per year are contributed by my associate and myself, exclusive of time spent in lesson planning and preparation.

Although we have apparently solved the problem of technical personnel, we have been plagued with recurrent difficulties in obtaining adequately trained secretarial help. The educational background of most of our applicants in basic spelling and English usage has been substandard, and those few applicants who have been qualified by training and experience have turned down proferred positions because of the low scale of salaries.

Our experience with a succession of x-ray secretaries has been rather disconcerting. After many harrowing months of training a neophyte in the mysteries of radiologic jargon, requiring time, tact, and extreme forebearance, it is a crushing experience to find that your Galatea has given you two weeks' notice to leave for other fields of endeavor where the salaries are higher and the work less demanding.

This shortage of trained medical secretaries represents a serious deficiency, not only in the x-ray department, but in the hospital as a whole. Possibly the problem could be solved by instituting a clerical training course in the hospital, supplementing the basic secretarial courses offered by the local high schools and business college. This step should be coupled with a more realistic scale of salaries competitive with private business and industry.

Service problems

Our nearest servicing headquarters is at Charlotte, 125 miles away. Since we had only



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one radiographic-fluoroscopic unit for the first five years following the dedication of our new hospital in 1953, a breakdown proved to be a serious inconvenience. However, following the installation of an additional unit of similar capacity, this problem has not been as acute. Moreover, our senior technicians, through close observation of the visiting servicemen, have learned to repair many of the more common breakdowns, and through their application and resourcefulness have saved the hospital many costly service fees. In many instances, service problems have been solved through instructions received over the telephone.

Filing problems

We have an assortment of filing problems. Because of the high incidence of illiteracy and the low educational level of many of our citizens, given names are often misspelled, nicknames rather than legal names are supplied, dates of birth and ages are often not known, and rural addresses keep changing with each admission. Furthermore, a preponderance of certain family names, especially in our Indian population, leads to frequent duplication of files on the same patient, or to intermixing of films of different patients in the same film file.

Because of limited space, all films except those of unusual interest are disposed of after five years. We have not yet adopted microfilming, and are still debating its practicality.

Communications with the medical staff

Another problem has been our difficulty in obtaining pertinent clinical information on the x-ray requisition forms. The effort required to supply a few salient data on the request slips appears to be an unwelcome chore to many of our referring physicians, who, in the absence of a house staff to whom this task might be delegated, chafe at any additional paper work.

All possible means of ferreting out clinical information are utilized besides the time-consuming attempts to locate the referring physicians over the telephone. We encourage personal consultation and welcome every opportunity to discuss problem films. The hospital chart is sent down to our x-ray department with all patients scheduled for gastrointestinal studies, and helpful clinical data may be found here. Our technicians are trained to pose certain key questions to patients. The cafeteria, to which many of our physicians gravitate for coffee before and after morning ward rounds, proves to be a fertile locus for bits of radiologic intelligence while the radiologist is adapting for fluoroscopy.

Our monthly x-ray conferences have been a means of improved liaison with the medical staff. These provide a rostrum for an exchange of information, and it is here that we may learn of the proved diagnosis or final disposition of a particular case. We may even infer, by scanning the daily operative schedule, that a particular chest film on our illuminator, having been ordered by a surgeon, must be a routine preoperative chest examination.

This problem of inadequate clinical data on patients referred to the x-ray department apparently prevails in most community hospitals lacking a regular house staff, and could be solved perhaps by adopting a policy of "No information, no examination," or by delaying a report on an examination until this information is supplied. Such a procedure would merely penalize the patient in terms of a longer hospital stay and a larger hospital bill, and would only antagonize the referring physician. A more subtle and probably more effective approach would be the combined use of all the stratagems we have described, coupled with persistent but tactful reminders to staff physicians of their obligations in this respect.

The Rewards

I have perhaps overstressed the problems and the frustrations of the radiologist in the community hospital. But there are many rewarding aspects, or "charms," as so aptly expressed by Cimmino[4].

There is the close relationship between doctor and patient. In the words of Bouslog[5], although the country radiologist "does not have the many advantages that are found in the large cities, he does have the pleasure of knowing his patients and of having his patients know their doctor."

There is the feeling of accomplishment in having been instrumental in the training of a few young people in the community for a career that may have been otherwise denied to them.

There is the sense of gratification in having not only witnessed, but also actively participated in, the improvement of medical standards in the community.

Summary and Conclusion

I have presented a few aspects of diagnostic radiology as practiced in a 265-bed community hospital in Southeastern North Carolina, indicating the number and range of examinations performed, and listing many of the problems faced by the rural radiologist.

Major deficiencies in space, equipment, and personnel, though related to the rapid increase in utilization of x-ray studies in general, are specifically affected in our region by the low family incomes and poor educational background of many of our citizens. These problems cannot be solved without a major socioeconomic revolution. It is beyond the scope of this paper to discuss the means by which this may be accomplished, but there is a "blowin' in the wind" which is stirring up new currents and eddies of hope. The terms "quality education" and "war on poverty," despite their political overtones, are being translated into definite programs. There is an emphasis on diversification of crops and new marketing and processing procedures, and the intensive drive for new industry reflects the fresh attitudes and broadened horizons of our civic and political leaders.

Despite the problems, the practice of diagnostic radiology in a community hospital like ours, is a challenging, exhilarating, and rewarding experience.

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Two Hundredth Anniversary of the University of Pennsylvania School of Medicine

Joseph B. Dudley, M.D.
Winston-Salem

The 200th anniversary of our country's first medical school will be celebrated throughout 1965. Almost 50 medical and scientific societies have scheduled meetings in Philadelphia to coincide with the bicentennial observance of the foundation of the School of Medicine of the University of Pennsylvania.

The ties between North Carolina physicians and this medical school have always been close. During the school's first century of existence it relied heavily on enrollment from southerners. More than 75 per cent of its graduates were from the South. Even today, 300 North Carolina physicians hold medical degrees from the University of Pennsylvania. Though abated by the establishment of our own medical schools, the flow north continues because of "the attractive pleasures of large cities, the prejudice of physicians which sends their pupils to the institution in which they themselves were taught and the traditional excellence and sound doctrine of the 'old school' of Philadelphia."[1]

Before 1765, medicine in Britain's American colonies lagged far behind that found in most parts of the civilized world. The Spanish colonies in the New World had been better organized. Medical schools were operating in Mexico in 1580; the school in Lima was founded in the same year that the Pilgrims reached America, and Havana's school

From the Department of Pathology, Bowman Gray School of Medicine of Wake Forest College, Winston-Salem, North Carolina.

antedated ours by 40 years.

The first medical degree in the English colonies was granted by Yale University in 1723. In his acceptance speech, the recipient carpingly commented that "he appreciated it just as much as if it had been from an institution of higher learning."[2] This honorary degree, as the remark indicated, did not herald the advent of medical education in America. Apprenticeships, varying from 3 to 7 years, remained for another 40 years as the sole source of medical education in this country. Its finished product was often ragged, prompting the jibe that "he that sinneth before his maker, let him fall into the hands of the physicians."[3]



Fig. 1. Surgeon's Hall, on of the early buildings of the medical school.

Upon completion of their apprenticeships in the 1750's, two young Philadelphians, John Morgan and William Shippen, enjoyed advantages open to few. They studied in London and at the Medical School of the University of Edinburgh. This dual educational experience convinced them of the need for a medical school in the colonies and they began gathering support for it while still abroad.

In 1762, when Shippen returned to Philadelphia, he organized courses in anatomy based on a skeleton, anatomic casts, and cadavers of criminals. Morgan returned three years later and, with an endorsing letter from Thomas Penn, proposed the foundation of a School of Medicine to the directors of the College of Philadelphia. The plan was accepted. Morgan was appointed the professor of theory and practice of physics and Shippen was soon after named the professor of anatomy and surgery.

Advertisements announced the opening of the school for "the entertainment of any gentlemen who may have the curiosity to understand the anatomy of the human frame." In November, 1765, courses in anatomy, surgery, midwifery, general medicine, pharmacy, and the "art of prescribing with elegance and propriety" were begun.

Within several years the faculty doubled with the addition of Adam Kuhn in materia medica and Benjamin Rush in chemistry. All four members of the faculty had graduated from the University of Edinburgh and were young, ranging from 24 to 30 years at appointment. The enlightened spirit of Philadelphia nourished the school. With a



Figure 2. The new Richards Medical Research building.

population of 20,000, it was the largest colonial city and boasted the best medical library and the first hospital in North America.

The Revolutionary War harmed the school less than did the academic and political war between the College of Philadelphia and the University of the State of Pennsylvania. This struggle resulted in revocation of the College's charter in 1779, rebirth of the institution four years later, and its eventual merger, in 1791, with the University of Pennsylvania. Though harassed, the medical faculty jumped from one institution to the other, providing continuous education through these unsettled years.

Benjamin Rush and Sir William Osler are prominent among the notable physicians figuring in the school's history. Rush, whose talents were not confined to medicine, was described by the medical historian Welch as "the greatest historical figure in American medicine." Osler, the outstanding teacher-clinician of America, regarded his association with Pennsylvania as the most instructive phase of his career. Though less famous, William Pepper virtually rebuilt the school in the latter half of the nineteenth century, with marked improvement in standards and educational methods.

The founder, John Morgan, was a noted surgeon and served as director-general and chief physician of the Continental Army. Phillip Syng Physic, "the father of American surgery," occupied this country's first chair of surgery in 1805. His academic descendents include D. Hayes Agnew, John B. Deaver, and I. S. Ravdin, all nationally prominent surgeons.

William Shippen founded North America's first lying-in hospital in 1765. H. L. Hodge, the leading obstetrician of his day, invented the pessary but mocked Semmelweiss's theory of puerperal fever. In 1889 Hirst introduced bedside obstetric instruction in American medical schools.

Other historical figures of note were anatomists Leidy and Wistar, who wrote the first American textbook of anatomy. Wood occupied one of the country's first chairs in neurology. S. Weir Mitchell was the "spiritual founder of modern neurology" as well as a popular poet and novelist.

Two centuries ago John Morgan said, in his inaugural address, that "perhaps this medical institution, the first of its kind in America, though small in the beginning, may receive a constant increase of strength and annually exert new vigor . . . it may give birth to other useful institutions of a similar nature."[4] Today, Pennsylvania receives more than $12,000,000 in annual grants for research, and the full-time medical faculty numbers 700. Surgeon's Hall (fig. 1), one of the early buildings, has been supplanted by a complex of buildings including the 940-bed University Hospital, three affiliated hospitals, and the new Richards Medical Research building (fig. 2).

This year the 85 other medical schools of this country join us in wishing the "old school" of Philadelphia continued growth and a happy birthday.

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JANUARY, 1965

SUGGESTIONS FOR AUTHORS

The *North Carolina Medical Journal* welcomes original contributions to its scientific pages, expecting only that they be under review solely by this *Journal* at a given time, and that they follow a few simple guidelines. The guidelines are as follows:

1. Subject Matter

Educational articles, especially those in which particular applications to the practice of medicine in North Carolina are developed, are one of the main objectives of this *Journal*.

Articles reporting original work by North Carolina physicians are invited, whether the work is done in a clinic, a laboratory, or both. The editor and his consultants will evaluate the work by the usual criteria, including a proper discussion of previous work, control observations, and statistical tests where indicated.

Historical articles, especially those dealing with local history, are considered of real value and interest.

2. Manuscripts

An original and a carbon copy of the manuscript should be submitted, one for review by the editorial staff, the other by referees. The manuscript should be typed on standard-size paper, double-spaced, with wide margins (one inch on each side).

3. Bibliographic References

References to books and articles should be indicated by consecutive numerals throughout the text and then typed, double-spaced, on a separate page at the end of the manuscript. Books and articles not indicated by numerals in the paper should not be included, "unless an exhaustive review of the literature has been made on a subject of sufficient importance to warrant such a survey."[1] Such a bibliography is seldom justified.

References will be much more valuable to the reader if they are given in a proper form and contain the full information necessary to locate them easily. The *North Carolina Medical Journal* follows the form used in the journals of the American Medical Association and the *Index Medicus*, giving the author's surname and initials, title of the article, name of the periodical, volume, inclusive page numbers, and the date of publication. It is believed that this style makes it easier for the reader to judge whether the reference is likely to prove useful to him, and enables him to locate it more quickly.

4. Tables and Illustrations

Tables and legends for illustrations should be typed on separate sheets of paper. The illustrations should be glossy black-and-white prints or line drawings. It is necessary to obtain permission from the author or publisher to reproduce illustrations which have been published elsewhere.

The *North Carolina Medical Journal* pays up to $20 on the cost of cuts for any one article. This amount usually covers the expense of reproducing from two to five illustrations, depending on the size and type of cuts required. Line drawings and graphs are less expensive to reproduce than photographs. Authors may publish additional illustrations by paying the extra cost.

The style followed by this *Journal* will be, in general, that outlined in the Style Book issued by the Scientific Publications Division of the American Medical Association, John H. Talbott, M.D., director.

By following the above suggestions, writers will greatly expedite the publication of papers accepted by the *North Carolina Medical Journal*.

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JANUARY, 1965

KIDNEY DISEASE—CHANGING IDEAS AND CHANGING DISEASES

There was a time when glomerulonephritis was generally thought to consist of three stages, each with fairly circumscribed symptoms, signs, and morphologic features. Then it became possible to produce a type of acute glomerulonephritis experimentally, but it was not followed, as night by day, by subacute and chronic glomerulonephritis. The

advent of renal biopsy by the omnipresent needle produced even more unsettling facts. The electron microscope will probably complicate the picture even further, although at present sorting out fact from artefact is keeping the electron microscopist busy within his own ranks. Dr. Fordham has woven many of these new ideas about kidney disease in with much useful information on the diagnosis of renal disease as it is seen by the practitioner, and presented the result in a provocative paper in this issue of the JOURNAL. His skill in the blending is such that the reader is advised to be careful lest a new fact slip past unnoticed.

In the matter of changing diseases, Dr. Fordham presents some observations on renal disease associated with prolonged consumption of headache remedies, noting that we are in an area where such addiction is common (and more acceptable than certain other addictions). He mentions in passing the occurrence of renal papillary necrosis in some of these patients. The current texts in pathology and medicine suggest that most cases of papillary necrosis occur in diabetics or in association with infection and urinary tract obstruction. The material at the North Carolina Baptist Hospital does not support this view, and also suggests that the disease is more common than it once was. Perhaps we North Carolinians need to look more intensively for missing papillae in radiographs, in urine (where Dr. Fordham found one), and at autopsy, for it is surprisingly easy to overlook papillary necrosis. The presence of something abnormal seems to be much more striking than the absence something normal.

* * *

THE COUNTRY RADIOLOGIST

When Dr. Silverton calls himself a country radiologist in his fine paper in this issue of the JOURNAL, one is chiefly struck by the fact that the country is less "country" than it once was. Within the last decade many North Carolina communities have acquired their first hospital, and older hospitals have expanded. Large numbers of specialists have settled in these communities, as exemplified by the 24 mentioned in Dr. Silverton's paper. If one is to accept the old dictum that the state of medical practice should be judged by what is done away from the large population centers, it would seem that medical practice is getting along fairly well.

Since it is only luck that lets one solve a problem without first recognizing and measuring it, Dr. Silverton's analysis of the problems he faces should be a big help in their solution. For many of the problems relief is already on the way. Others, like his many requisitions which lack adequate information, are tied up with human nature and may never be solved, though detours around them might be developed. Perhaps the readers of the JOURNAL will find answers for some of Dr. Silverton's problems, or for their own. It is more likely that they will recognize some problems, but hopefully they will also recognize, as he has, the many good things about the current situation in "country" practice.

* * *

DIABETES—PILLS OR INSULIN —OR WHAT?

The paper by Drs. Bressler, Marler, and Styron which appears elsewhere in this issue, lucidly documents the point that many diabetics who are being treated with pills deserve something better, namely, insulin. While troublesome symptoms of grossly unregulated diabetes may not intervene, many patients on pills do not feel as well as they do on insulin. Even diabetes adequately managed by means of oral agents is subject to change without notice. We have recently seen in the hospital a 62 year old woman who had been well controlled on diet and oral agents for seven years. Within the space of a week, in association with a severe bronchitis and laryngitis, classical diabetic acidosis developed, requiring intravenous fluids and 220 units of insulin in the first 24 hours. Such sudden unanticipated development of diabetic acidosis has been particularly a problem in children. The oral agents have no place in the management of diabetes in children; the honeymoon period of 3 to 12 months after initial discovery and treatment, during which time the insulin requirement is often quite small in children,

sometimes allows the physician to persuade himself (or be persuaded) to unwisely abandon insulin therapy.

Good control of diabetes mellitus in the sense of close chemical control characterized by normal blood sugars and no sugar in the urine is accepted by many physicians interested in this disease as the goal of ideal therapy. Certainly, patients in close chemical control are not likely to have symptoms of diabetes and do feel well. From a practical point of view, the most important hazard of close chemical control is the occurrence of severe insulin reactions, since truly tight control necessitates occasional overdosage of insulin.

One must be cautious in accepting uncritically the virtue of such control, in the light of evidence by electron microscopy that thickening of the basement membranes of the glomerular capillaries is present in the children of diabetic parents many years before signs of clinical diabetes develop. This kind of evidence suggests that the so-called degenerative complications of diabetes, such as the Kimmelstiel-Wilson renal lesion, are an inherent part of the diabetic heritage and are not necessarily related to the manner in which the diabetes is regulated. The observation that insulin-induced hypoglycemia is the most potent known stimulus to the endogenous secretion of growth hormone in man impels additional caution in discounting insulin hypoglycemia of brief duration as an annoying but harmless problem.

An intriguing question revolves around the comparative effects of oral agents and insulin in acute painful diabetic neuritis. This complication may appear at any time during the course of diabetes. It is not as closely correlated with the duration of diabetes as the eye and kidney changes seem to be. Usually, painful diabetic neuritis appears after a long period of relatively inadequate diabetic regulation. Neuritis is particularly prone to appear when good control is initially established after such a period. Often it seems to follow by several months a stressful episode of some sort. Spontaneous remission of the complication is the rule. One must be careful not to take therapeutic credit where none is due. However, we have seen patients adequately controlled by chemical standards on an oral agent who, while so controlled, develop acute diabetic neuritis which undergoes remission coincidentally with the administration of insulin. This suggests that, given equal degrees of diabetic control, insulin has some therapeutic advantage in diabetic neuritis other than its effect upon the blood sugar. Observations in many patients over a long period will be needed to demonstrate the validity of this contention.

The severity of atherosclerotic complications such as coronary heart disease in diabetics treated for many years with insulin is well known. It remains to be seen whether atherosclerosis wil be more or less severe in patients treated over long periods with the oral agents.

Fortunately, in this modern era a variety of effective agents is available for treating diabetes. Our responsibility as physicians is to select the best, not the most convenient, way of treatment for each individual diabetic.

EMERY C. MILLER, M.D.

* * *

PHILADELPHIA'S EDINBURGH

In the medical line, New York and Philadelphia have long contested the honor of having the first city hospital in the American colonies. Little contest has been attached, however, to Philadelphia's pride in having founded the first medical school, as outlined in Dr. Dudley's paper in this issue of the JOURNAL. This great school has made such a broad contribution to American medicine that the pride of our members who are alumni of other schools should find no offense in its publication.

To forestall those who would find us insensitive to the early contributions of other medical schools in the New World, we must make certain acknowledgements. While New York has not claimed the first medical school in the colonies, the first doctor of medicine degree in the colonies was granted in that city when King's College (now

Columbia) made the award in 1770. The School of the College of Philadelphia gave its first M.D. degree in 1771, and its first M.B. in 1768. Our Latin American brethren are sensitive, apparently not without reason, about being excluded from tabulations of "American" firsts, so we hasten to add that the oldest medical schools in the New World are those in the former Spanish colonies. According to the list published by the World Health Organization, the medical school in Santo Domingo (the Dominican Republic until recently) was founded in 1538 and that in Mexico City in 1578.

On the verge of a considerable increase in the number of medical schools here in the United States it is well to give some time to acquiring historic perspective. It should be no surprise if some current medical schools have troubles similar to those of long ago, as exemplified by the current problems which the Seton Hall University School of Medicine is having in New Jersey. The history of the University of Pennsylvania School of Medicine should contain some valuable information pertaining to longevity, and more important, to continuing growth in all aspects of medical education.

President's Message

VENDOR PAYMENTS UNDER KERR-MILLS

Since implementation of the Kerr-Mills Bill in North Carolina on July 1, 1964 and the recent educational activity with regard to its provisions, there have been heard a few rumblings of discontent as to reimbursement for medical services. This is a logical reaction, especially since physicians' services are included in 36 of the 41 states in which the program is operating. It seems pertinent, therefore, to review briefly the philosophy of thinking in regard to vendor payments as it applies to the North Carolina program. Space does not permit a complete review of all actions taken by the Council and House of Delegates, but I will try to outline the salient points and those interested may obtain further information from the Transactions of April 1962.

At a called meeting of the Executive Council on November 28, 1960, the Council upon recommendation by the Committee on Chronic Illness voted to request the inclusion of vendor payments in the formulation of the Kerr-Mills Bill to be presented to the Legislature. The feeling back of this was that if a certain group of patients (primarily those eligible for MAA) were to be made wards of the federal government, the physician had the right to expect reimbursement for his services as well as hospital services, especially since his tax monies would help provide the latter.

During the following three months a great deal of activity took place regarding the provision of health benefits for the elderly citizens. It will be recalled that the new administration was pushing Medicare legislation under Social Security, and unfortunately many of our state legislators were in sympathy; certainly the Kerr-Mills legislation did not receive enthusiastic support. It appeared that if Kerr-Mills *was* to be implemented it would have to be presented in the most economical form possible. Furthermore, it was felt that *if* vendor payments were requested and obtained, they would constitute no more than token remuneration such as that permitted by other state agencies and would fall far short of a realistic reimbursement. Once stuck with a schedule of medical fees of this type, it would be virtually impossible to increase it.

Finally, it was recognized that those persons eligible for Old Age Assistance were usually treated free of charge, while those under MAA were charged according to their means. On February 12, 1961, the Council reversed its stand on vendor payments and voted *not* to include these in Kerr-Mills legislation, but with the definite understand-

ng that this *in no way* prevented the physi-ian from making a charge for his services o the patient himself. This action was ap-roved at a called meeting of the House of Delegates on February 26, 1961. A bill to his effect was presented before the General Assembly later in the year but failed to pass.

The status of legislation pertaining to medical care for the aged changed little dur-ng the next two years except for the defeat f the King-Anderson version of Medicare n the Senate on July 13, 1962, by a vote of 2 to 48, thereby allowing more time to pro-note Kerr-Mills legislation.

In 1963 the Kerr-Mills Bill was passed in he North Carolina General Assembly in ssentially the same form as the defeated ill of 1961, and on July 1, 1964, it was mplemented with a nominal budget of 2,000,000. Since that time the Medical So-iety of the State of North Carolina and the North Carolina Department of Public Wel-are have coordinated their efforts toward mplementation of the program, and while t has moved slowly, it is gaining headway.

The question of vendor payments has een raised during the past few months by ersons both within and outside the medical rofession. It has been the feeling of the Council, however, that if implementation of he Kerr-Mills program is to provide a trong deterrant to a Social Security Medi-are program, it must become solidly en-renched before the next Congress meets. Any attempt to request vendor payments *at his time* would, in our opinion, betray our intent and jeopardize the support of many who have been sympathetic to our purpose, especially the congressmen.

To summarize briefly the following points should be observed:

1. We feel that successful implementation of the Kerr-Mills Program in North Carolina offers the best possible deterrent to Medicare.
2. We feel that a request for vendor payments *at this time* would seriously hamper this implementation.
3. If Kerr-Mills proves successful in meeting the health needs for elder citizens and Medicare is defeated, it would seem reasonable to request the inclusion of *realistic* reimbursement for medical services in future budgetary allocations.
4. There is nothing in the Kerr-Mills program to prevent any physician from charging for his services by contractural agreement with the patient, and in this particular phase Kerr-Mills does not differ from Medicare.

Political atmosphere changes rapidly, especially during an election year, and viewpoints must also change. All too frequently action must be taken and decisions made without the opportunity for leisurely deliberation. In this respect I can only say that the Council and Officers of your Society conscientiously try to follow courses which will be most beneficial for both physicians and patients.

T. S. Raiford, M.D.

I think it was about the year 1910 or 1912 when it became possible to say of the United States that a random patient with a random disease consulting a doctor chosen at random stood better than a fifty-fifty chance of benefiting from the encounter.—Lawrence J. Henderson, quoted by Alan Gregg in *Challenges to Contemporary Medicine*, New York, Columbia University Press, 1956, p. 13.

Bulletin Board

COMING MEETINGS

Conference of County Medical Society Officers and Committeemen—The Carolina Hotel, Pinehurst, February 6.

The Watts Symposium—Watts Hospital, Durham, February 19-20.

North Carolina Mental Health Association, Annual Meeting—Hotel Sir Walter, Raleigh, March 11-13.

Duke Refresher Course in Anesthesia—Duke University Medical Center, Durham, April 8-10.

North Carolina Chapter, American College of Surgeons—The Blockade Runner Hotel, Wrightsville Beach, April 23-24.

Medical Society of the State of North Carolina—Charlotte, May 1-5.

North Carolina Heart Association, 16th Annual Meeting and Scientific Sessions—Jack Tar Hotel, Durham, May 20-21.

Fifth District Medical Society Annual Meeting—Mid Pines Club, Southern Pines, October 6.

Southern Regional Meeting, American College of Gastroenterology—Roosevelt Hotel, New Orleans, La., March 7.

Southeastern Surgical Congress, 33rd Annual Assembly—Statler Hilton Hotel, Washington, D. C., March 29-April 1.

New Members of the State Society

Drs. James Hendry Robinson, Anes, 26 Kenwood Ave., W., Wilmington; Richard Dean Tester, R, 2106 Alpine St., High Point; Bobby Alan Rimer, 318 Westwood, High Point; Harold John Bradley, Jr., U, 1018 N. Elm St., Greensboro; Douglas Ray Smith, GP, 126 W. Charlotte Ave., Mt. Holly; Grover Watts White, U, 406 N. Highland, Gastonia; Vincent C. Andracchio, Anes, Park View Hospital, Rocky Mount; Lawrence A. Heavrin, GP, Blowing Rock Medical Clinic, Blowing Rock; Hortense Bee Gatling, Pd, 136 S. Union, Concord.

News Notes from the University of North Carolina School of Medicine

President William C. Friday of the University of North Carolina recently was elected a director of the John and Mary R. Markle Foundation of New York City.

He has served on several of the Markle Fund's selection committees which meet regionally to confer with candidates nominated for medical school grants.

Nine U.N.C. medical faculty members, including Dr. Isaac M. Taylor dean of the Medical School, have been Markle scholars in Academic Medicine—Drs. John B. Graham, Walter Hollander, Jr., William D. Huffines, William E. Lassiter, George D. Penick, Judson J. Van Wyk, T. Franklin Williams, and Robert Zeppa.

* * *

The U.N.C. School of Medicine has four members on the 14 committees of the National Board of Medical Examiners for 1964-65.

Board members create a national examination designed to measure as accurately as possible the medical knowledge and competence of medical students and groups of physicians at specified points in their careers.

Medical faculty members named to the panel of medical experts include Dr. Nathan A. Womack, a surgeon who is chairman of the Part II test committee; Dr. William J. Cromartie, microbiology; Dr. John B. Graham, pathology; and Dr. Louis G. Welt, medicine.

* * *

A medical chemist and two biochemists at the University of North Carolina will conduct a basic research program on glycerol ethers under a three-year, $63,000 grant just approved by the National Institutes of Health.

Dr. Claude Piantadosi of the U.N.C. School of Pharmacy is the principal investigator and Dr. Carl E. Anderson and Dr. Michael K. Berkut of the U.N.C. School of Medicine are the co-investigators.

Dr. Piantadosi said an attempt will be made to find out the relationship between glycerol ethers and plasmologen fractions. Some of the compounds to be studied have been involved in blood clotting and hardening of the arteries.

* * *

Diseases of the thyroid gland, emotional disturbances of children, the training of ambulance attendants, and health examinations for business executives were on the agenda for the twenty-ninth annual Piedmont Postgraduate Medical Assembly in Clemson, South Carolina, recently.

The program was presented for the first time by faculty members from the U.N.C. School of Medicine under the sponsorship of the Anderson County (S.C.) Medical Society.

* * *

The American Society of University Pathologists, with a limited membership of 30 pathologists from the United States, Canada and Mexico, held its annual meeting in Chapel Hill on November 6-7.

Scientific programs were conducted at the Morehead Planetarium. Hosts were Dr. John B. Graham of the U.N.C. School of Medicine and Dr. F. Stephen Vogel of Duke University Medical Center.

During the meeting, Dr. Vogel spoke on "Mitochondrial Minutiae."

* * *

Emergency medical services being provided to the American public were described here by a federal health official as "a mixed-up mess."

Dr. Joseph H. Gerber of Washington, D. C. chief of emergency medical service for the U.S

Public Health Service, attended a meeting of the advisory committee of the North Carolina Ambulance Service Study. He said the state is "one of the few places with a determined, organized effort to get the facts about the chaotic situation existing in emergency medical services. The only way to develop a sound program is to have the facts," he pointed out.

The committee is drafting a final report on a two-year research study entitled "Organizing Ambulance Service in the Public Interest." Conducting the study are the N.C. Hospital Education and Research Foundation, the University of North Carolina Department of Hospital Administration and the Institute of Government at U.N.C.

Dr. Robert R. Cadmus, chairman of the U.N.C. Department of Hospital Administration and director of the ambulance service study, said he expects the advisory committee's final report to be completed in early January.

The report is expected to recommend certain minimum standards for ambulance operators in the state. Legislation necessary to establish the minimum standards is being worked on for consideration by the 1965 General Assembly.

* * *

Two postgraduate courses in medicine, sponsored by the U.N.C. School of Medicine, have begun in January in Edenton and Kenansville.

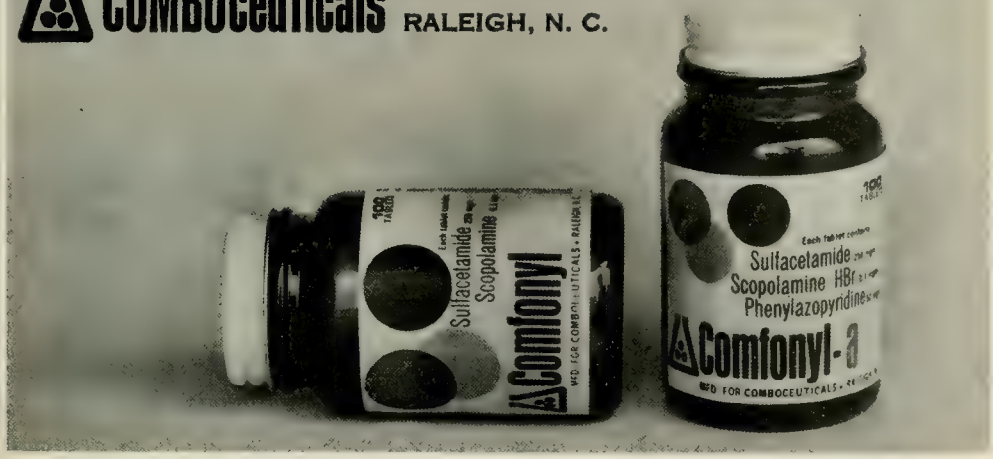
The courses will consist of two lectures one day a week over a six-week period. The Edenton course, which began January 13, is co-sponsored by the First District Medical Society, and the Kenansville course, which began January 14, is co-sponsored by the Duplin County Medical Society.

All Edenton lectures will be given in the Edenton Restaurant at 4:30 p.m. and 7:30 p.m.

The Kenansville lectures will be given at the Country Squire Restaurant (Highway 24) at 5:00 p.m. and 7:30 p.m.

The lecturers for these courses, in order of their appearance are: Dr. Victor C. Vaughan, III, professor and chairman, Department of Pediatrics, Temple University School of Medicine; Dr. William M. McKinney, instructor in neurology, Bowman Gray School of Medicine; Dr. Roger F. Spencer, instructor in psychiatry; Dr. Arthur J. Prange, Jr., associate professor of psychiatry; Dr. James F. Newsome, associate professor of surgery and Dr. Charles E. Flowers, Jr., professor of Obstetrics—all of the U.N.C. School of Medicine; and Dr. Philip A. Tumulty, professor of medicine. Johns Hopkins University School of Medicine.

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2. TRIPLE SULFONAMIDES	100	218	108	223	118	231
3. SULFAMETHYLTHIADIAZOLE	120	10	150	21	260	45
4. SULFISOXAZOLE	36	30	51	44	80	70
5. SULFAETHYLTHIADIAZOLE	360	225	380	230	440	250
6. SULFAMETHOXYPYRIADAZINE	460	165	466	168	475	174

—•●•—

Because of this extremely high solubility and rapid excretion, urinary tract toxicity is uniquely rare or absent with SULFACETAMIDE.

Credit by the American Academy of General Practice for the number of hours attended by the individual physician has been requested for these courses.

News Notes from the Bowman Gray School of Medicine of Wake Forest College

A team of physiologists at the Bowman Gray School of Medicine has uncovered evidence that an overactive heart may be primarily responsible for causing high blood pressure.

Dr. Harold D. Green, Gordon Gray Professor of Physiology and chairman of the department, reported the new theory at the 13th annual meeting of the American Heart Association's Council on High Blood Pressure Research, held recently in Cleveland, Ohio.

The concept, which for the first time indicts cardiac output as a primary factor in elevated blood pressure, is based on four years of research at the medical school. The work includes extensive studies on laboratory animals and some data from human patients.

Participating in the project, in addition to Dr. Green, were Dr. Carlos E. Rapela, associate professor; Dr. Herman E. Schmid Jr., assistant professor; and Dr. Margaret C. Conrad, instructor.

Their findings indicate that, due to a breakdown in the mechanism which regulates heart function, the contraction force of the heart muscles is increased, causing the heart to pump more blood than is needed. As the blood courses through the circulatory system, the excess is rejected by the active vascular beds, resulting in increased resistance to blood flow, a further rise in blood pressure and an additional workload on the heart.

The resistance to blood flow was originally thought to be the primary cause of high blood pressure and therapeutic measures have been based on this concept.

The Bowman Gray researchers, however, explain the resistance in the vascular beds as being part of a normal circulatory process, known as autoregulation. If the autoregulation mechanism is functioning properly, the vascular beds in such vital organs as the brain and kidneys will allow only as much blood flow as they need. And while protecting their respective organs, they become accomplices to the high blood pressure plot.

Dr. Green said that many additional studies on human patients will be needed to prove or disprove the new theory. If an overactive heart is proven to be the real culprit in high blood pressure, therapeutic steps can be taken to regulate the contraction force of the heart muscles. Better control of the disease would then be possible.

Calling All

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Join other Carolina nurses and their friends who plan to attend the 13th Quadrennial Congress of Nurses at Frankfort, Germany, June 17-21, 1965—and—enjoy a five-country tour of Europe, June 10-31, visiting England, Germany, Switzerland, and Italy. You will fly by jet, New York to New York. and by plane in Europe. You will stay at the finest hotels. You will visit the must-see places of Europe, along with your fellow nurses. And, although this tour was designed specifically for Carolina nurses, others may join this bargain tour if space is available. Write today for free folder and further information.



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A three-month field research project in the jungles of South America has established the squirrel monkey as perhaps the most suitable laboratory animal scientists have come up with for the study of atherosclerosis.

The project, conducted last summer at the Tarpon Zoo Compound in Leticia, Colombia, was a collaborative effort of the Bowman Gray School of Medicine and Louisiana State University School of Medicine. It was aimed at finding a monkey with much the same cardiovascular problems as man.

Dr. Charles C. Middleton, assistant professor of laboratory animal medicine at Bowman Gray, more than a year ago discovered that squirrel monkeys develop atherosclerosis. But he could not be certain whether the disease occurred naturally or whether it developed as a result of dietary and/or environmental changes after the monkeys were captured and shipped to this country.

The only way to find the answer was to study the animals in the jungle. Support for the project was provided by the United Health Foundations, Inc., and the Louisiana Heart Association.

Dr. Middleton and Dr. Jorge Rosal, a Guatemalan physician and instructor in pathology at L.S.U. moved their equipment into the field laboratory and studied 227 monkey specimens, including 120 squirrel monkeys and 40 white-lipped marmosets.

Studies on other species of sub-human primates remain incomplete and Dr. Middleton plans to return to Leticia in May to continue the field research.

* * *

A scientific movie, prepared at the Bowman Gray School of Medicine, was awarded the top prize at a recent meeting of the American College of Gastroenterology in New York City.

The movie, "Cinefluorography of Lesions of the Upper Gastrointestinal Tract," provided the first compilation of studies ever prepared on the stomach and upper digestive tract.

Authors of the film are Drs. George C. Barrett, James F. Martin, and I. Meschan. Barrett, former instructor in radiology at Bowman Gray, is now assistant professor of radiology at Emory University School of Medicine. Drs. Martin and Meschan are professors of radiology on the Bowman Gray faculty.

The entire 25 minute color movie, complete with sound track, was filmed at the medical school. The production was supported by an $8,000 grant from E. R. Squibb and Sons, the pharmaceutical division of Olin, Corp.

* * *

Dr. James F. Martin, professor of radiology, has been elected vice president of the North Carolina Radiological Society. He was elected to

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the post at the annual fall meeting of the society in Charlotte.

* * *

Three members of the faculty of the Bowman Gray School of Medicine participated on the program of the 58th annual meeting of the Southern Medical Association in Memphis, Tennessee. Presenting papers were:

—Dr. Tom P. Coker, instructor in orthopedics, "The Effect of Fibrinolysin upon Tendon Healing in the Dog."

—Dr. Frank C. Greiss Jr., assistant professor of obstetrics and gynecology, "Pitocin-Stimulated Labor Causing Fetal Death."

—Dr. Thomas F. O'Brien Jr., assistant professor of medicine, "The Clinical and Radiological Features of Chronic Atrophic Gastritis."

Dr. Greiss also spoke at a November 16 meeting of the Southern Gynecological and Obstetrical Society in Memphis. His topic for this session was "Therapy for Hypotension Induced by Spinal Anesthesia during Pregnancy."

* * *

Dr. Richard L. Burt, professor of obstetrics and gynecology, participated in a recent conference on "Diabetes as a Complication of Pregnancy" in Cambridge, Massachusetts. He spoke on "In Vivo Response to Insulin during Pregnancy."

* * *

Dr. Margaret C. Conrad, instructor in physiology, presented a paper on "Harmonic Analyses of Volume Pulses in Normals and Patients with Peripheral Vascular Disease" at a meeting of the American Health Association in Atlantic City.

* * *

Dr. Frank R. Lock, professor and chairman of the Department of Obstetrics and Gynecology, was a member of the guest faculty for a recent two-week postgraduate course of the Honolulu Medical Society in Honolulu, Hawaii.

* * *

Dr. Jesse H. Meredith, assistant professor of surgery, presented a paper on "In Vivo pH Measurements of Upper GI Tract, Hiatus Hernia and Achalasia" at a recent meeting of the Southern Thoracic Surgical Association in Atlanta, Georgia.

He also spoke at a symposium on "Trauma and Disaster Medicine" at the Medical College of Virginia. His topic was "Definitive Management of Abdominal Injury."

* * *

Dr. I. Meschan, professor and chairman of the Department of Radiology, presented a refresher course on "Cerebral Arteriography and Venography at the annual meeting of the Radiological Society of North American in Chicago.

* * *

Dr. D. Louise Odor, assistant professor of anatomy, presented a paper on "Electron Micro-

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Pierce D. Nelson, M.D.
Phone: 328-2211

scopic Study of Unilaminar Ovarian Follicles of the Hamster" at a meeting of the Southern Association of Anatomists in Gainesville, Florida.

Special Notice

The Air Force invites physicians interested in joining the 464 Medical Service Flight at Seymour Johnson Air Force Base to contact Lieut. Col. Edward Brown or Lieut. Kenneth Green, 5th Tactical Hospital, Seymour Johnson AFB. Doctors within one hundred miles of the base are wanted to serve one week-end per month, and have a yearly 15-day period of active duty.

North Carolina Heart Association

An all-time record high of $30,121,526 was contributed by the public to the Heart Fund in 1964, marking the first time the campaign has topped the $30 million mark, according to the American Heart Association. The total represents an increase of $2,221,143 over amounts received in 1963, the largest gain in several years, and includes $614,161.67 contributed by citizens of North Carolina.

The North Carolina Heart Association's 1964 campaign was the first state Heart Fund effort in the nation to report a record final tally. The state heart group's receipts during 1964 exceeded those of any other voluntary health agency in North Carolina, according to James F. Lane, of Chapel Hill, North Carolina Heart Association treasurer.

Edgecombe-Nash Medical Society

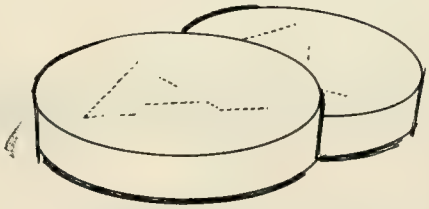
The Edgecombe-Nash Medical Society has announced the following officers for 1965:

President, Dr. L. W. Robertson; president-elect, Dr. John Whatley; first vice president, Dr. L. A. High; second vice-president, Dr. John Chambliss; secretary-treasurer, Dr. Ralph Dunn; editor of the Bulletin, Dr. S. H. Justa.

Southern Psychiatric Association

The Annual Meeting of the Southern Psychiatric Association held at the Hotel Muehlebach in Kansas City, Missouri October 2, 3 and 4, 1964 was the stimulating conclave members have come to expect. The scientific program included, among others, remarks from President Wilse Robinson on "The American Conformist," an original contribution in the study of male homosexuality by Edward H. Knight, an analysis of psychiatric determination of compensible dependency states by Philip B. Phillips, and a paper on psychiatric treatment of the aged by Philip R. Reed.

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The Association, which has always had a limited membership, has been going through a searching analysis of its structure, with membership policies the major item of business for the meeting. Officers for the following year are:

Joseph S. Skobba, president; Sullivan G. Bedell, president-elect; Floy Jack Moore, vice-president; Henry B. Brackin, Sr., vice-president; Mark A. Griffin, Jr., secretary-treasurer; and Hamilton Ford, James B. Galloway, Weir M. Tucker, Board of Regents.

U. S. Department of Health, Education, and Welfare

"Up and Around," a booklet to aid the stroke patient in learning activities of daily living, has been issued by the Heart Disease Control Program of the Public Health Service, U. S. Department of Health, Education, and Welfare.

"Up and Around" supplements the widely-used companion booklet "Strike Back at Stroke," PHS Publication No. 596, which emphasizes prevention of further disability of the stroke patient by means of proper positioning in bed, range-of-motion exercises, and similar early restorative measures. Both booklets are to be used under a physician's direction, according to Public Health Service recommendation.

Single copies of "Up and Around" are available without charge from the Public Health Service, Washington 25, D. C. Copies may also be purchased from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C., at fifty cents each or $7.50 per hundred.

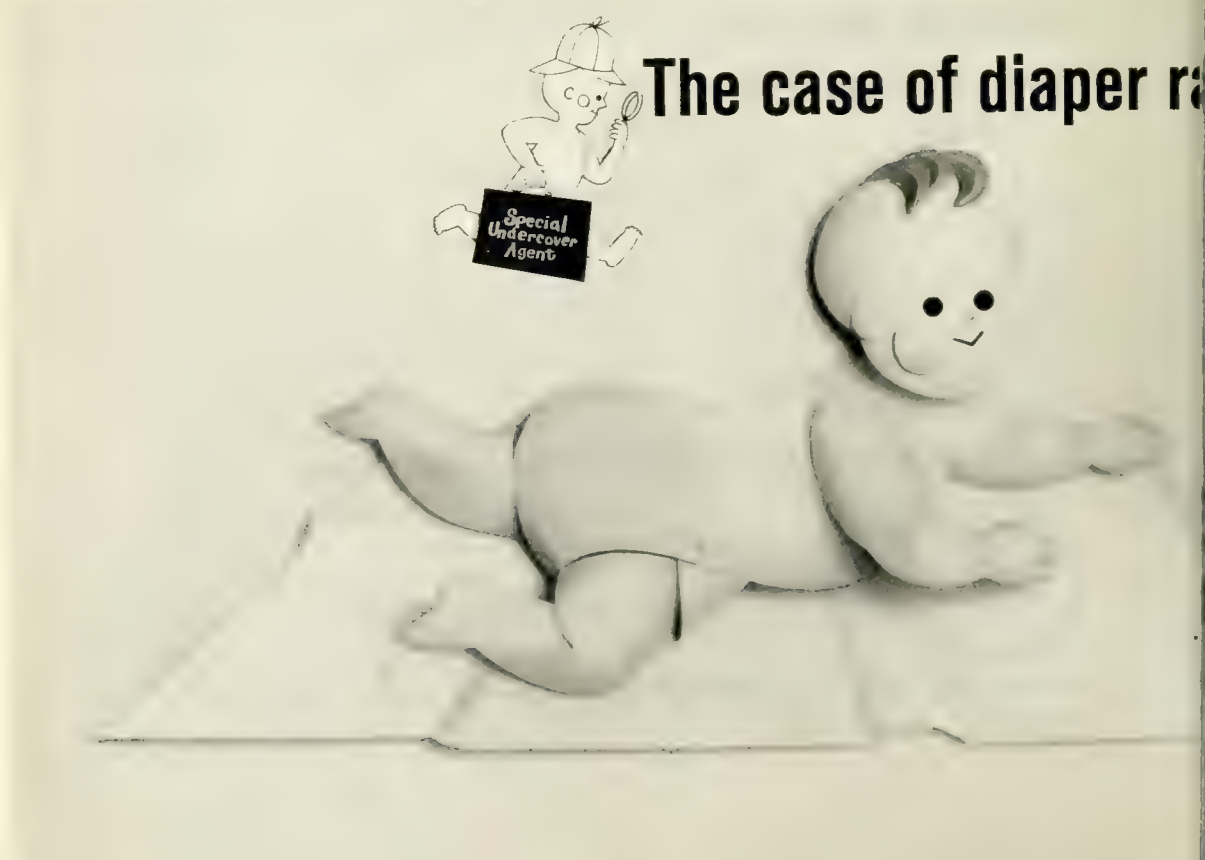
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American Medical Association

A 32-minute, 16 mm. sound film on the scientific highlights of the 113th annual convention of the American Medical Association in San Francisco last June is now available for showing.

Presented on film are scientific exhibits, interviews with panelists and an excerpt from the motion picture program.

A print of this new documentary—MEDIFILM REPORT NO. 6—may be obtained by writing either the Film Library of the American Medical Association in Chicago or the Audio-Visual Department of Schering Corporation in Union, N. J.



American Board of Obstetrics and Gynecology

Applications and letters of request from previous applicants requesting to be scheduled for the forthcoming Part I examination of this Board to be given July 2, 1965 will be accepted in the Board office up until the closing date of February 28, 1965. Applications and letters of request postmarked after that date will be returned to the sender.

Application forms and Bulletins may be obtained by writing to the office of the Secretary—Clyde L. Randall, M.D., American Board of Obstetrics and Gynecology, 100 Meadow Road, Buffalo, New York 14216.

Servicemen applying for the Part I examination are requested to submit the name of their Commanding Officer.

Association of Military Surgeons

Professional Liability Insurance—at preferred rates—has just been offered to members of the Association of Military Surgeons of the U. S., who practice medicine and dentistry.

Although the Federal Torts Claims Act waives the government's immunity to tort suits and places the U. S. Government in the same position as any other employer, it does not relieve the service doctor in liability cases alleging malpractice as an individual.

For additional information on this plan, or on membership, write to: Executive Director, AMSUS, Suite 132, 1500 Massachusetts Avenue, N.W., Washington, D. C. 20005.

In Memoriam

JOHN WESLEY FOSTER, M.D.

Whereas, Doctor John Wesley Foster was called from us by death on November 7, 1964, and

Whereas, Doctor John Wesley Foster was a loyal and faithful member of the Forsyth County Medical Society for thirteen years, during which period of time he was devoted in his practice of medicine and gave untiringly and whole-heartedly of his medical skill to the veterans of this State.

Resolved, That on behalf of the entire membership of the Forsyth County Medical Society, the Bereavement Committee adopts these resolutions in tribute to the memory of our late fellow member and colleague. And be it further

Resolved, that a copy of these resolutions be spread upon the minutes of the Forsyth County Medical Society, and a copy sent to the bereaved family.

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ANNUAL REPORT OF CASES

DUKE POISON CONTROL CENTER

November 1, 1963 - October 31, 1964

Total Products: 546	*Known fatalities: 6	Suicide attempts known: 18 Suicide attempts suspected: 18
	External medications	19
	Plants	20
	Cosmetics	37
	Insecticides	50
	Pesticides	10
	Internal medications	221
	Household, farm and industrial products	188
	Insect bites:	1
		546

Only the frequent incidents are listed in the various categories

EXTERNAL MEDICATIONS:		19
PLANTS:		20
Mushrooms:	7	
Poke berry:	6	
Others:	7	
	20	
COSMETICS:		37
Hair preparations (dyes, shampoos, creams, rinses, etc.):	12	
Deodorants:	4	
Perfumes:	7	
Others:	14	
	37	
INSECTICIDES:		50
PESTICIDES:		10
INTERNAL MEDICATIONS:		221
Aspirin:	70	
Baby: 30		
Adult: 40		
Cold and cough medications:	29	
Novahistine: 6		
Cheracol: 6		
Nose drops: 2		
Laxatives:	19	
Milk of magnesia: 4		
Ex-lax: 7		
Feenamint:		
Tranquilizers:	19	
Librium: 6		
Elavil: 6		
Sedatives:	19	
Vitamins:	14	
Chocks: 5		
Fluoride: 4		
Analgesics:	7	
"Reducing pills":	4	
Hormones:	4	
Diuretics:	4	

Anticonvulsants:	4
Iron:	3
Antihistamines:	3
Antiemetics:	3
Others:	19
	221

INSECT BITES: 1

546

AGES

Less than 1 year	20
1-2 years	117
2-3 years	157
3-4 years	75
4-5 years	22
5 and over	32
Adult over 18	74
Unknown	29
Groups	2

Over 50% in 1-3 year group.

COMMERCIAL EXPOSURE ("on the job"): 16

Insecticides:	9
Chlorine gas:	2
Others:	5
	16

All inhalations

PRODUCTS INHALED AT WORK, FARM, OR HOME: 23

Insecticides:	10
Bleach mixtures:	2
Others:	11
	23

SKIN CONTACT: 9

Insecticides:	5
Others:	4
	9

EYE CONTACT: 4

PRODUCTS TAKEN BY ALCOHOLICS AS ALCOHOL: 4

MENTALLY RETARDED CASES: 5

SUICIDE ATTEMPTS KNOWN: 18
SUICIDE ATTEMPTS SUSPECTED: 18

Under 20 years

INGESTION ON "DARE" OR "FOR KICKS": 4

THREE CASES GIVEN AS TREATMENT

1. Tyzine Nose Drops given by parents in excess.
2. Tolferol prescribed for a known alcoholic with liver cirrhosis.
3. Baby aspirin given every three hours, by a mother, with small amount of water.

FATALITIES

1. Pri-Mal embalming fluid: suspected taken as suicide attempt—age 64 years.
2. Bruce Floor Cleaner (contains petroleum distillates): ingestion in a child—treatment of steroids, oxygen and antibiotics—death on 4th day.

Effect of Medium Chain Triglycerides in Patients with Subtotal Gastrectomy	Malcolm P. Tyor, M.D.
Effects of Hyperbaric Oxygenation on Pulmonary Vascular Resistance in Patients with Pulmonary Hypertension	Andrew G. Wallace, M.D.
An Evaluation of the Effects of Hyperbaric Oxygenation as a Form of Treatment for Acute Myocardial Infarction	Robert Whalen, M.D. Herbert A. Saltzman, M.D. Henry McIntosh, M.D. Ivan Brown, M.D.
A Study of Hereditary Renal Disease	Robert E. Whalen, M.D. Roscoe Robinson, M.D.
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For a copy of the new Wyeth film catalogue, ask any Wyeth representative or write to Wyeth Film Library, Box 8299, Philadelphia, Pa. 19101. For borrowing any film, at least three weeks' notice is needed to make the film available.

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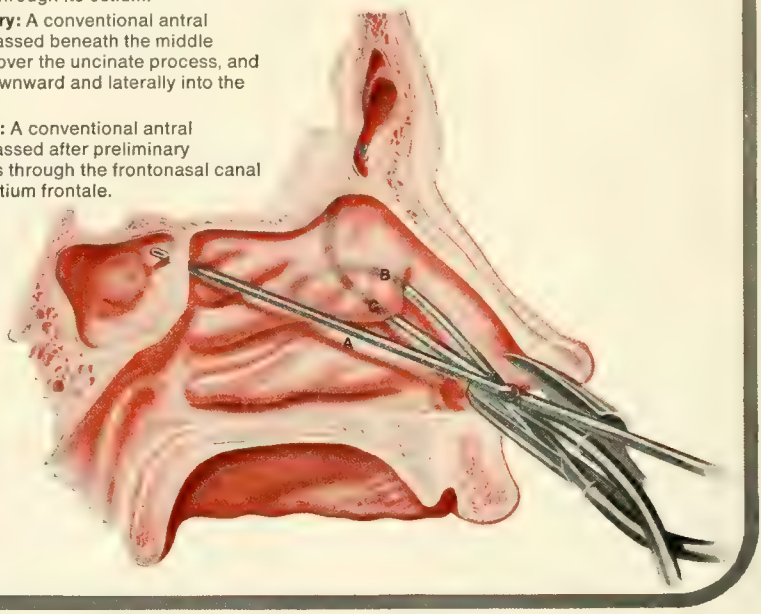
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A rhinologic approach to the sinuses
Sagittal anatomical section of nasal cavity showing approach for probing or irrigation by cannulas.

A—Sphenoid: A sphenoid cannula (under 13.5 cm.) passed around the middle and superior turbinates to the anterior wall of the sinus through its ostium.

B—Maxillary: A conventional antral cannula passed beneath the middle turbinate, over the uncinate process, and rotated downward and laterally into the ostium.

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*Reed, G. F.: Sinusitis, New England J. Med. 267:402, Aug. 23, 1962.

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VOLUME 26 FEBRUARY, 1965 NUMBER 2

Antibiotic Sensitivity Reactions in Children

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CLEVELAND, OHIO

Although allergic reactions to antibiotics are infrequent in children, the reported incidence has increased as more emphasis has been placed on their diagnosis and prevention. In view of the tremendous volume of antibiotics administered, however, the reported number of reactions, is still small. Sensitization follows the primary injections. It follows, then, that the number of injections will far exceed the number of reactions, especially in children, in whom hypersensitivity is quite uncommon.

The antibiotics finding widest use are penicillin, tetracycline, and streptomycin. Usually these drugs produce no significant toxic effect. When adverse reactions do occur, however, they vary from mild to fatal[9]. They have been observed most often in subjects having a personal or family history of allergy such as hay fever or asthma; however, such a history is not always obtained.

Drug toxicity must be suspected whenever signs and symptoms are not easily explained by the patient's primary disease. The reaction may be immediate or delayed—usually seven to ten days if the child has not received the drug previously. The diagnosis is confirmed if the symptoms disappear when the drug is withdrawn.

Immediate reactions: Reactions occurring within the first 24 hours are classed as immediate. The following have been noted: (1) anaphylaxis, (2) asthma, (3) rhinitis, (4) urticaria, (5) angioneurotic edema, (6) eczema, (7) gastrointestinal disturbances, (8) conjunctivitis, (9) eosinophilic pneumonitis, or Loeffler's syndrome. The antibiotics primarily responsible for these reactions are penicillin, chlortetracycline, oxytetracycline, and polymyxin B. Most of the antibiotics, however, have produced at least mild reactions in some sensitive patients.

For editorial comment see page 79

Anaphylactic reactions occur most frequently in patients who previously have shown sensitivity to a certain antibiotic. Table I, from Welsh and colleagues[20], shows the increased proportion of penicillin reactions as compared with other antibiotics in the general population[20]. Table 2, from the same source[20], shows the breakdown into age groups and demonstrates the smaller percentage in the pediatric age group.

Delayed reactions take a form resembling serum sickness. They may occur from 48 hours to 4 weeks after the drug is administered, but usually are seen between the seventh and tenth days. This syndrome is characterized by fever, urticaria, angioedema, lymphadenopathy, leukocytosis, and polyarthritis. Fever is one of the most common and frequent manifestations of drug allergy.

Vascular reactions: There are two types of vascular reactions. The first has a relatively long clinical course marked by gastrointestinal symptoms, hypertension, peripheral neuropathy, and secondary renal disease. The second is a fulminating disease characterized at first by fever, skin eruption (most commonly of the contact eczematoid type) and symptoms of serum sickness, then rapidly progressing to nephritis, myocarditis, and often death.

Dermatologic reactions constitute by far the largest group, the most common form

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Table 1

Preparations Associated with Anaphylactoid Shock

Year reaction occurred	1953	1954	1955	1956	1957	Unknown
Number	24	179	231	301	60	14

Penicillin preparations	**No. Cases**	**No. Deaths**
IM injections	611	63
IM injections with streptomycin or dihydrostreptomycin	122	9
IV injections with streptomycin	1	0
Tablets	35	0
Troches	4	0
Capsules	7	0
Oral suspension	3	0
Inhalation	4	0
Ointment	1	0
Nose drops	1	0
Skin test	1	0
Dental paste	2	0
Syringe contaminated with penicillin	1	0
Total	793	72
Other preparations		
Streptomycin (IM)	9	1
Dihydrostreptomycin (IV)	3	1
Chloramphenicol capsules	1	0
Tetracycline capsules	1	0
Tetracycline in oil (oral)	1	0
Tetracycline (IM) or testosterone (IM)	1	0
Total other preparations	12	2
Total all preparations	809	74

Percentage of deaths—9.1%

Table 2

Anaphylactoid Reactions by Age, Group, and Sex

	Age (Years)	**Male**	**Female**
Penicillin preparation	1-12	30	16
	13-25	55	56
	26-35	68	82
	36-45	65	90
	46-55	81	50
	Older than 55	88	61
	Age unknown	22	29
		409	384
Other antibiotic preparation	1-12	0	0
	13-25	1	0
	26-35	1	2
	36-45	1	3
	46-55	2	2
	Older than 55	2	1
	Age unknown	0	1
		7	9

Table 3

Dermatologic Lesions

Lesion	Penicillin	Streptomycin	Other Antibiotics	Sulfonamides
Urticarial	+++	+++	+	+
Purpuric	+	+	−	+
Morbilliform	+	+	−	++
Scarlatiniform	+	+	−	+
Vesicular	−	+	−	+
Pustular	−	−	−	+
Bullous	+	+	−	+
Eczematoid	+	+	+	+
Seborrheic dermatitis	++	+++	++	++
Contact type eczema	++	+	+	++
Exfoliative dermatitis	+	++	−	+
Photosensitivity	+	++	+	+++
Dermatophytid	++	+	+	−
Pityriasis rubra	+	−	−	−
Erythema multiforme	+	−	+	+
Stevens-Johnson syndrome	+	−	−	+
Erythema nodosom	+	−	−	+
Lupus erythematosus	−	−	−	+
Periarteritis nodosa	+	+	+	+
Nodular vasculitis	+	+	+	+
Ulcerative or granulomatous	−	−	−	−
Lichenoid	−	−	−	−
Psoriasiform	−	−	−	+
Fixed drug eruption	+	−	+	+
Mucosal	+	++	+	+

being dermatitis. In contact dermatitis, absorption of the drug leads to formation of a conjugate that spreads throughout the skin via the lymphatics[15]. The various forms of eruptions are seen in Table 3.

Hematologic reactions most commonly take the form of allergic purpura, agranulocytosis, leukopenia, and hemolytic jaundice. Aplastic anemia resulting from such drugs as the sulfonamides and chloramphenicol is probably a toxic rather than an allergic reaction. Table 4, from Welsh and others[20], shows the various allergic and toxic reactions.

Hepatic reactions: Allergic hepatitis has been caused by para-amino salicylic acid and sulfadiazine[15]. Large intravenous doses of the tetracyclines may cause moderate fatty infiltration of the liver, clinical jaundice, and impairment of hepatic function. These reactions occur most frequently in patients with pre-existing liver damage. Jaundice appears about the seventh to tenth day after administration.

Neurologic reactions are very rare with the commonly used antibiotics.

Reactions to Antibacterial Agents

Penicillin

All forms of penicillin are capable of causing sensitization, and almost every type of allergic drug reaction has been attributed to this drug. It has been found that immediate and delayed reactions are about equal in incidence.

Penicillin sensitivity may take place in the following ways: (1) in utero, (2) from ingestion of milk; (3) from atmospheric fallout in hospitals and doctor's offices, (4) from questionable cross-sensitivity between penicillium molds and penicillin, and (5) from penicillin in polio vaccines.

One reason suggested by Lapin and Mond[11] for the infrequency of allergic reactions in infants and children is probably the comparative rarity of *Trichophyton* infections in children; hence, the "id" reactions are practically unknown in this age group. Some 5% of the general population have been found to be allergic, but of the 65 children tested by Peck and others[11], none showed a spontaneous reaction, as compared with 5.4% of tested adults.

Table 4

Blood Dyscrasias

	Aplastic-anemia		Granulo-cytopenia		Thrombo-cytopenic purpura		Leuko-penia		Total	
	C*	D*	C	D	C	D	C	D	C	D
Chloramphenicol	12	9	3	1	1	1			16	11
Chloramphenicol with other drugs	19	14	3	0	2	0	1	0	25	14
Penicillin					1	0			1	0
Penicillin, streptomycin and oxytetracyline			1	0					1	0
Penicillin, streptomycin and sulfonamides					1	1			1	1
Tetracyline			1	1					1	1
Novobiocin, penicillin and sulfonamides					1	1			1	1
	31	23	8	2	6	2	1	0	46	27

*C Cases, D Deaths

Lapin[10] demonstrated that reactions to penicillin following oral administration are rare. In a series of 402 patients, ranging from three months to 10 years of age, who had an upper respiratory infection, oral penicillin was given prophylactically to prevent complications such an otitis media, rheumatic fever, acute glomerulonephritis, and cervical adenitis. Of these children, 3 had a generalized erythema which proved to be roseola, 2 had an urticarial rash which could reasonably be attributed to penicillin sensitivity, and 6 showed slight looseness of stool, perhaps due to penicillin. No major reactions were seen. He concluded that the advantages of oral penicillin in preventing infection outweighed the risk of sensitivity, since they were achieved at a price of only mild urticarial reactions is only 0.5% of the cases.

A report by Collins-Williams and Vincent[2] confirmed the belief of most pediatricians that penicillin sensitivity in children is rare. An intensive search was carried on at the Department of Pediatrics at the University of Toronto[2], where of thousands of children seen, only 3 with clinical sensitivity to penicillin could be found. In another study of 600 private pediatric patients[2] 85 were known to have some allergy. Reactions in the non-allergic group consisted mainly of angioneurotic edema and urticaria. The percentage of definite reactions in this group was 0.6. In the allergic group, however, 6% of the patients manifested definite reactions, with symptoms consisting of arthralgia, purpura, and urticaria.

In a similar study by Berkowitz, Glaser, and Johnstone[1], penicillin was given to 411 children, of whom 280 were known to be allergic. Of the allergic children, 10% had reactions, but none occurred in the non-allergic group. The over-all incidence of an allergic response to penicillin was 6.8%. The allergic reactions encountered were urticaria or angioedema in 14 children, morbilliform eruptions in 11, and atopic dermatitis in 2. Classified as "side reactions" were vomiting, diarrhea and joint pains, each of which occurred in one child, and local swelling and pruritus at the site of injection in another.

Another report[12] stated that from 1946 to to 1951, thousands of injections of repository procaine penicillin G had been administered to hundreds of children both as inpatients and outpatients. During this period not a single child had a clinically significant sen-

sitization reaction. Many of these children received courses of pencillin at wide intervals. Most of them were seen in general clinics and hospital wards and in the main were not allergic.

In a series reported by Levine and Moss[12], approximately 1000 repository penicillin injections were given to 226 allergic children. Many of these children were known asthmatics. Since respiratory infections are known to precipitate asthmatic attacks, it was thought that these infections, if treated early, would diminish the severity of the attacks. The average number of infections was 4.

It was found that in the whole group of 226 children there was no evidence of sensitivity to pencillin except in one patient who manifested a pruritic erythema lasting only 24 hours. This child had previously received one injection of penicillin. Skin tests for both penicillin and Trichophyton were carried out on 40 children who had received from three to six penicillin injections several months previously. There were no immediate reactions of the wheal type to either penicillin or Trichophyton, even in the child previously mentioned, who gave evidence of mild sensitivity to penicillin. In one child not clinically sensitive to penicillin a moderately positive 24-hour delayed reaction to penicillin occurred. Two children with chronic atopic eczema and one with asthma gave positive delayed reactions to Trichophyton.

From the given data it is evident that sensitivity to the purified forms of crystalline procaine penicillin G is extremely rare in children. It is also apparent that even allergic children are unlikely to develop sensitivity reactions. In the 40 children tested in this series, 3 (7.5%) gave positive reactions to Trichophyton.

The reason for the increased degree of sensitization in adults may be due not only to the greater number who are sensitive to fungi, but also to the longer duration and intensity of the fungal infection.

In a study conducted at the Allergy Clinic, Hospital for Sick Children, Toronto[2], skin tests were performed on 200 patients including both allergic and nonallergic children. There were no positive reactions to the scratch test, but there were three to the intracutaneous test. None of the three children were clinically sensitive to penicillin. Many positive reactions were obtained with molds, however. These occurred twice as frequently in the allergic group as in the nonallergic group, but there is no correlation between positive skin tests obtained with penicillin and those with penicillin molds.

Sulfonamides

As a group, the sulfonamide drugs may excite any type of drug reaction, from skin allergy and drug fever, which are the most common, to the allergic vasculitis manifested by such disorders as renal disease, carditis, and hepatitis, which is the most serious.

Fink and Smith[5], from the Children's Hospital of Michigan, made a detailed and exhaustive investigation of sulfonamide reactions. During their period of observation 60 cases of drug fever (of which 25 were accompanied by rashes), 2 cases of malignant neutropenia, 2 cases of hemolytic anemia, and 4 cases of anuria were seen. The total number of children with drug complications was 68, or less than 1.4% of those treated (5000 cases). Most patients received sulfadiazine; the rest, sulfathiazole or sulfamerazine.

The outward reactions which these authors reported were as follows:

1. *Renal*: Two types were reported: one, a mechanical process due to crystals which plug the tubules, the second, a toxic effect produced by the drug upon the kidney parenchyma and degeneration of the tubules.These changes, and similar necrotic effects on other organs, are thought to be due to sensitivity to the drug. This effect was rather slight since only 10 out of 1500 patients (0.6%) evidenced hematuria. Only 4 cases of anuria were encountered, 2 of which were fatal. In both of these sulfathiazole was used. No child died as a result of renal damage from sulfadiazine or sulfamerazine.

2. *Blood and blood-forming organs*: The incidence of leukopenia was reported as between 2 and 3 per cent. Whenever marked leukopenia (a count of 3500 or less) was observed in this study, drug fever and a

rash were usually present, indicating a sensitivity reaction. In the 2 cases of neutropenia, the granulocytes almost disappeared, but on discontinuation of the drug the cell count returned to normal.

After the initial administration the appearance of systemic effects such as fever with or without a rash generally indicates the development of what may be termed a toxic reaction. However, this does not mean necessarily that the patient has acquired permanent sensitivity to the drug. In this study 60 febrile reactions were encountered, for an incidence of 1.2%. Twenty-five of these patients had accompanying rashes either while the temperature was rising or shortly afterward. Skin eruptions occurring in the absence of fever never proved to be of drug origin. Scarlatiniform or measles-like eruptions were most common. Diffuse redness of the pharynx often accompanied the rash and caused sore throat or difficulty in swallowing. Leukocytosis, with counts as high as 70,000 and more than 90% polymorphonuclear cells, was not unusual during the febrile episodes. In all instances, the counts returned to normal after the drug was discontinued. Only one case of a toxic reaction resulting from application of a local drug was found in this series, despite frequent use of the drug for many types of skin infections.

Regarding repeated administration of sulfonamides, Fink and Wilson[6] observed little evidence of increased incidence of reactions in children during a second or subsequent course of the drug. Although several investigations have failed to confirm this finding, the majority of the authors agree that a second course of the drug does not result in increased hypersensitivity.

The material reported by Fink and Smith[5] does not indicate that the uncomplicated administration of a sulfonamide drug sensitizes the patient to subsequent doses of the drug. However, patients who have once manifested a febrile reaction to a drug are likely to have become sensitive to that drug and may react with fever and rash to its re-administration. During the 2½ years covered by the study, every patient who gave this immediate type of reaction had previously shown a febrile reaction to the same drug. If a complete history fails to disclose an earlier febrile reaction, a child cannot be considered sensitized and subsequent courses can be given without fear of an immediate reaction.

Test doses of sulfonamides were given to 34 children who had shown elevated temperatures following initial courses. Of the 21 children who had manifested fever and rash originally, only 7 did not react to the test doses. All the remaining 14 children developed both fever and rash within 48 hours.

Test doses of different sulfonamide drugs were given in 9 instances to 7 children. Five of the children reacted to test doses of sulfathiazole. Two had reactions. One of these was given sulfamerazine and the other sulfapyridine, without reaction in either case. Two children reacting to sulfathiazole did not show any untoward effect from the administration of sulfadiazine. It is not definitely known how much cross-sensitization can occur, but apparently a different sulfonamide is less likely to produce a reaction in sensitized children than the original drug.

Most deaths from sulfonamide therapy are caused by renal reactions, but a majority also involve toxic febrile reactions. The predominant findings in all cases reviewed was the presence of areas of focal necrosis in the kidney as well as the liver, spleen, lungs, brain and heart, indicating widespread damage. Rich[17,18] has demonstrated that the areas of necrosis are the result of periarteritis-nodosa-like lesions which he believed were manifestations of sensitivity.

The untoward reactions to sulfonamide agents are infrequent in children and infants and rarely cause serious effects. Since the danger of severe reaction to subsequent doses of sulfonamides exists only when a febrile reaction has occurred previously, there is apparently no more reason to fear harmful effects from multiple courses of drug therapy than from the first course. Because of the low incidence of toxic reactions, sulfonamides may safely be administered to children and infants when indicated[1].

Chloramphenicol

Chloramphenicol has caused a few allergic reactions. Aplastic anemia and the "gray syndrome" in premature infants are consid-

ered to be toxic rather than allergic reactions. Although bone-marrow damage is the major toxic effect, there are several minor untoward effects—skin rash, gastrointestinal disturbances, and glossitis[7].

Streptomycin, isoniazid and para-amino salicylic acid

Streptomycin produces skin disturbances primarily. Fever is the most common systemic reaction. Of the toxic reactions to streptomycin, damage to the eighth cranial nerve, manifested by vestibular disturbances and auditory impairment, is the most important. Anaphylaxis is a rare complication.

Isoniazid rarely causes a reaction. In the adult the most common are peripheral neuropathy, while in children seizures may result from an overdose. It is thought that toxicity to isoniazid results from pyridoxine deficiency, because of the large demonstrable excretion of pyridoxine[3].

The chief toxic reactions to para-amino salicylic acid are gastrointestinal, and may produce anorexia, nausea, vomiting, and diarrhea. Pruritic dermatitis and drug fever are seen occasionally. When large doses are given to children, there is a slight possibility that acidosis may develop[7].

Novobiocin

Novobiocin is a significant antigen, causing a maculopapular rash in about 12.5% of patients treated for ten days or more[1].

Tetracycline

The tetracyclines produce few allergic reactions, severe dermatitis being produced occasionally. When administered parenterally, these drugs are potentially as allergenic as penicillin. In a series reported by Berkowitz, Glaser, and Johnstone[1], oxytetracycline was given to 112 children, of whom 88 were known to be allergic. Allergic reactions occurred in 3 of the allergic children (3.4%) and in none of the non-allergic. The allergic reactions were angioedema, a generalized morbilliform eruption, erythema and desquamation in one child each. "Side reactions" were gastrointestinal distress, nausea, vomiting and diarrhea, and occurred in 10.2% of the allergic children. This antibiotic, unlike penicillin, caused side reactions in non-allergic children (8.3%), giving a total overall incidence for this group of 9.8%.

In another study by these authors[1], chlortetracycline was given to 208 children, of whom 168 were allergic. Seven (3.7%) had allergic reactions consisting of maculopapular eruptions in 3, urticaria in 3, and aggravation of a previously existing topic dermatitis in 1. No reactions occurred in the non-allergic children. The overall incidence for the whole series was 3.3%. Side reactions occurred in 17.2% of the allergic children and in none of the non-allergic group. The overall incidence of side reaction was 14%.

Bacitracin

The major toxic effect of systematically administered bacitracin is renal tubular damage; however, these effects are usually reversible. There have been no reports of toxicity following oral and topical administration.

Neomycin

Parenteral injections of neomycin may cause serious renal injury manifested by albumin and casts with an elevation of the nonprotein nitrogen. Damage may also be caused to the eighth cranial nerve. Therefore parenteral injection is generally contradicated.

Tyrothricin

The toxicity of tyrothricin prevents its parenteral administration. This is a potent hemolytic agent, and must not be administered by any route which might permit it to come in contact with the blood stream[4].

Polymyxin B

Hypersensitivity reactions either do not not occur or are very rare in association with polymyxin B. Parenteral injection however may damage the kidneys by producing glomerular and tubular changes. Oral and topical reactions are clinically insignificant.

Erythromycin

Untoward reactions are uncommon and usually of little consequence. Occasionally drug fever may be produced by erythromycin.

Kanamycin, ristocetin, carbomycin and oleandomycin

There is too little evidence at this time to evaluate properly the toxicity of these drugs.

Experience at North Carolina Baptist Hospital

Fourteen cases in which reactions to antibiotics were the primary cause of hospitalization had accumulated in the pediatric files of North Carolina Baptist Hospital by 1960. These included eight cases of penicillin reaction and six cases of sulfonamide intoxication. Patients ranged in age from three months to 11 years.

Only one case of penicillin reaction could be classified as immediate, with the appearance of urticaria in the absence of other allergic manifestations two days after the drug was given. The remaining seven cases were all delayed reactions. All eight patients exhibited urticaria, and five serum sickness. In one case of the delayed type, fever, edema, and lymphadenopathy developed, while in another, fever and dermatitis medicamentosa were the only manifestations.

The six cases of sulfonamide intoxication varied in clinical expression. Sulfamerazine was the offender in three cases, sulfadiazine in two, and sulfamethoxypyridazine in one. Fever was observed in three cases; lymphadenopathy, leukopenia, and hepatosplenomegaly in two; while crystalluria and a maculopapular rash occurred in two cases each. Hematuria, oliguria, anuria, anemia, and myalgia were also noted.

Prevention

A history of allergy in the family of the child should suggest a greater likelihood of drug allergy in the child. A previous drug reaction of any kind, and particularly sensitivity to the drug in question, is extremely significant.

Potentially dangerous drugs such as chloramphenicol should be avoided whenever possible. This antibiotic should never be used indiscriminately for minor illnesses, and the blood should be examined repeatedly during the course of medication. Chloramphenicol therapy should be limited to severe infections caused by organisms susceptible to it but resistant to other antibiotics[7].

The incidence of hypersensitivity is higher in allergic children than in those who are not: 20% in the former group as compared to 2.4% in the latter. With the antibiotics as well as other drugs such as diphenhydramine hydrochloride (Benadryl), phenobarbital, codeine, aspirin, and epinephrine, the incidence of side reactions is higher in children having a history of allergy than in others. Many authorities have concluded that drug allergy is largely a function of age, since the older the child, the more drugs he is likely to have received.

Intradermal, scratch, or conjunctival tests are recommended before administering penicillin if there is a history suggestive of drug allergy. The shortcomings of skin testing are: (1) failure to detect the patients who develop delayed reactions; (2) false positive and negative reactions, and (3) serious reactions to testing.

Treatment

The development of penicillinase (available as Neutrapen) for clinical use has been a valuable tool in the management of penicillin allergy. It acts on penicillin by hydrolyzing it to penicilloic acid, which is not allergenic. The reported action is so rapid that penicillin levels are reduced to zero in one hour after intramuscular injection. The usual dose is 800,000 units given intramuscularly. If the reaction recurs or clinical response is delayed, a second injection of 800,000 should be given within three days of the first.

If a drug must be given in the presence of a suggestive history, it should be given orally. If injections are necessary, they should be given in the arm or thigh rather than in the hip, so that a proximal tourniquet may be used if an immediate reaction occurs. If a reaction is impending, the patient may often complain of itching and tingling. Severe respiratory difficulties with symptoms of shock may develop. When such a reaction occurs, 0.5 ml of aqueous epinephrine in a dilution of 1:1000 is immediately given intramuscularly in the opposite arm. The patient should be watched for symptoms of overdosage of epinephrine. An antihista-

mine (10 mg of Chlortrimeton or 20 mg of Benadryl) can be given intravenously, but these drugs are not nearly as important as epinephrine.

Later, blood or plasma may be employed to combat shock. ACTH or corticosteroids may be given intravenously for sustained therapeutic effect, but have no value in immediate treatment. Attempts to hasten the elimination or neutralization of the drug in the case of penicillin by the use of penicillinase or BAL may be tried. Desensitization measures should be carried out subsequently[1].

Summary

1. Manifestations of hypersensitivity reactions include the following: (1) immediate reactions, occurring within 24 hours and consisting of urticaria, asthma, anaphylaxis, rhinitis, eczema, gastrointestinal tract disturbances, conjunctivitis, and eosinophilic pneumonitis; (2) delayed reactions, occurring from 48 hours to four weeks and including urticaria, lymphadenopathy, leukocytosis, and polyarthritis; (3) vascular reactions; (4) dermatologic reactions; (5) hematologic reactions; (6) hepatic reactions; (7) neurologic reactions.

2. Penicillin reactions are infrequent in children, but any of the preparations of this drug are capable of causing reactions. The incidence of reactions is higher in allergic children than in those who do not have a history of allergy. Reports of sensitivity to oral or pure crystalline penicillin G are extremely rare. Positive reactions to skin tests are rare with penicillin and only slightly more common to penicillium molds showing the infrequency of Trichophyton infections in children.

3. Reactions to sulfonamides are also uncommon in children, but may assume any form ranging from skin reactions and drug fever to allergic vasculitis. In one large series the incidence was 1.4%. There is little evidence of a reaction resulting from a second administration if there was none after the initial administration; however, if fever and rash occur primarily, the patient will probably react to a subsequent course of the drug. It is thought that there is little cross-sensitization to the sulfonamides. Death usually occurs as a result of renal necrosis.

4. Chloramphenicol, streptomycin in conjunction with isoniazid and para-amino salicylic acid rarely cause reactions.

5. Novobiocin causes allergic skin reactions in about 12.5% of the patients receiving it.

6. The tetracyclines have been reported as having sensitizing potentialities as great as those of penicillin, the reactions usually being immediate, and also of causing such side effects as nausea, vomiting, and diarrhea in nonallergic children, unlike penicillin. The incidence of reactions associated with chlortetracycline and oxytetracycline has been reported as about 3.3% and 3.4% respectively.

7. A complete history is essential before prescribing antibiotics if there is any suggestion of an allergy in the patient. Previous drug reactions are extremely significant. The incidence of drug allergies is much higher in allergic children than in those whose histories do not suggest allergy. Skin tests should be performed before administering penicillin if the history is suggestive; however, these tests have several shortcomings.

8. The development of penicillinase has been valuable in combatting penicillin reactions. Following administration there is a rapid lowing of the penicillin level in the blood. Other drugs such as epinephrine and antihistamines may be lifesaving. Blood, plasma, ACTH, and corticosteroids are useful as supportive measures.

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Tomorrow's Target

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When the Woman's Medical College was founded in 1850, its backers faced and overcame formidable opposition. Whatever belief the public may have held, the exclusively masculine medical profession knew that there was no place for women physicians. Through diligence, intelligence and, at times, sheer stubbornness, over the years those pioneers and their successors have conclusively proved that women can and do function most effectively as physicians. Women have demonstrated their effectiveness in every field of medical practice. They have been especially devoted to the care of patients, but in addition many have made significant contributions through research, teaching, and administrative efforts.

For editorial comment see page 79

Every medical school in the United States will now admit women to their classes. From the total number of women applicants in the entire country about the same percentage as of the men applicants is admitted. The number is low because the number of women applicants is low. Hospitals generally welcome women physicians to their house staffs for training and to their attending staffs to help provide community health services.

While minor problems remain, competent women today have equal opportunity to enter the medical profession and to serve beside their brothers on an equal basis. Therefore, I prefer not to discuss equal opportunities, nor even equal performance, but rather, consider new and more important problems of medical education specifically concerned with women physicians. In the next few minutes I want to discuss how a medical school oriented toward the training of women to become physicians may do a better job of educating women than those colleges concerned mainly with the training of men.

Because of their unique characteristics, women physcians can do some tasks better than men physicians; I believe that these differences constitute the strength of the women in the profession. It follows that the real opportunity of the Woman's Medical College, as it enters into its second century, is in the development of an educational program for women that will take fullest advantage of the characteristics of the segment of the medical profession toward which it is primarily oriented.

Medicine today requires a great diversity of skills and techniques. While these are joined together by important historical, educational and social forces under the honored label "Physicians," there is a place in medicine today for a great range of temperament, aptitudes and interests, provided these characteristics occur in intelligent,

Inaugural address, President and Dean, The Woman's Medical College of Pennsylvania, Philadelphia, March 6, 1964.

dedicated and strongly motivated individuals.

There are many women studying medicine who neither need nor ask for any special consideration. They are so competent and so dedicated that they can and do meet the competition with men on an exactly equal footing. This footing is, after all, slippery ground since it was established by and for men physicians. We have sought, and will continue to seek, such young women for our students, just as every other medical school is doing. My only concern about these women is that there are not enough of them.

Meeting the Problems

If, however, we are going to attract to medicine and make a place in the profession for the increased numbers of women clearly needed in the future, we must pay attention to some of the problems which may confront a young woman who wants to become a physician. She wants to pursue a professional career which is most demanding. At the same time she has the laudable urge to build a nest and fill it with her own, and we cannot deny that this conflict often exists. We, on the other hand, need not demand that she always tackle both jobs simultaneously. Many can do it satisfactorily only if these essentially full-time tasks are done in sequence.

I see many advantages, and no insurmountable obstacles, in providing an opportunity for a woman medical student or physician to interrupt her professional career for an interval of homemaking. True, many difficulties present themselves but they are are minor indeed as compared with the faults of the alternative choices which seem to demand that most women entering medicine abandon their feminine instincts; or, to insist that only superwomen can enter medicine and no ordinary mortals need apply; or else that the physician slight both her family and professional responsibilities. None of these alternatives is a satisfactory general solution for the individual, for the public, or for the profession.

Undergraduate education

As we strive for the most effective medical training for women, the more general problem of their preliminary scientific education cannot be ignored. If anything in the future is certain, it is that medicine will become increasingly more scientific and that a thorough grounding in biology, chemistry, physics and mathematics will be absolutely essential for the physician.

While I can claim no special experience in undergraduate education, some deficiencies seem obvious. In the secondary schools, education in mathematics and science is today taken very seriously when it involves boys. On the other hand, an interest in science among girls usually evokes a tolerant reaction, and active encouragement only uncommonly. If we are really serious about educating women for their place in a modern, technically oriented society, this attitude of parents and teachers must change.

At the next level, the undergraduate medical school, a solution for the conflicts of the woman medical student seems to be primarily a matter of flexibility of the curriculum. In this matter much has already been done at the Woman's Medical College. Leaves of absence and special consideration for make-up work because of pregnancy has come to be almost a matter of routine. Neither our faculty nor our patients seem very surprised by an obviously pregnant medical student or doctor.

Most medical schools show great reluctance toward admitting a student much beyond the average age which will allow for the usual number of uninterrupted years of schooling. The Woman's Medical College has admitted a few students who have sought careers after sending their last children to school. Some of these experiments have been very successful. The mature woman seeking admission to medical school will probably obtain a hearing at our college more readily than at any other medical school.

However, much remains to be done. Women medical students have unique financial, social, and professional problems that often cannot be solved by means that are effective for men. While we find it relatively easy to provide for brief leaves of absence, we need better means of providing for prolonged leaves and for the repair of the technical obsolescence which results so rapidly.

Hospital training

The training of interns and residents is an integral function of any medical school today, and promises to become even more important. It seems reasonable to suppose that a medical school whose primary goal is to train women for medical careers should also provide special emphasis on certain fields within medicine to which women are especially attracted, and for which they are particularly well qualified. This emphasis, and the departmental strength to provide it, is most important at the graduate level, perhaps less so at the undergraduate level.

I shall not be so brash, before the faculty and alumnae of The Woman's Medical College, to suggest publicly what fields of medicine I think are most suitable for women. While believing that there are no skills and no aptitudes that belong exclusively to either sex, I believe that women physicians, as a group, bring to medicine somewhat different kinds of strengths, attitudes and capabilities.

I am asking the faculty to give serious thought to means by which these characteristics should influence the future development of the College. Among other things, we should give consideration to the natural interests of women in certain types of patients and categories of health and illness, their natural aptitudes for certain kinds of tasks, their possible needs for predictability of working schedules, and needs for mobility because of their husbands' occupations.

Continuing education

However, our greatest opportunity for a significant contribution to the education of women physicians may be in a still later period of their continuing education. Most women students manage to complete medical school and at least a portion of their hospital training before the needs of their family force a retrenchment in professonal activities. While the children are small, some of the doctor-mothers can do so little professional work that they may not only fail to increase their knowledge and skill but in fact lose some that they have already acquired.

After a few years, however, the children are off to school and the doctor-mother is ready to return to her professional work. At this point she faces some very difficult decisions. Bluntly put, because of scientific advances, she is far behind the best of her profession. While many jobs are open to her, they are not likely to be the really demanding and professionally rewarding positions. While these are useful tasks and should be done, they may require a level of performance below full capacity for many women.

At the same time, it may be very difficult for her to get the kind of retraining needed if she is to make full use of her capabilities.

For many reasons, deviation from the regular sequence of training is not encouraged in medicine. Barring illness or academic failure, most physicians will have gone through four years of training at a single school without interruption. These years will have been followed by an internship and three or four years of residency without a break in sequence, and with a gradual increase in responsibility.

The physician who interrupts her professional life for six or eight years at any point cannot readily refresh her clinical skills and gain new basic science knowledge by any of the usually available methods.

The usual postgraduate courses are aimed at providing skills and knowledge in highly specialized fields, or at a refurbishing of a minor nature. The repetition of a year or two is not satisfactory because she needs both scientific retraining, and a chance to polish her clinical skills. Each person therefore will require an individually planned program of retraining. There are few, if any, traineeships of this type available today and little financial support for them. New approaches and new ideas are needed. The Woman's Medical College does not yet have definite plans but we have started to think about them.

Medicine Needs Women

The solution of the problems described has importance far beyond The Woman's Medical College or even beyond medical education. If we can clearly identify the unique needs and develop successful pilot programs for the training of women phy-

sicians we can perhaps make a contribution to medical education as important as the one which has resulted in the acceptance of women as physicians. The rigid lockstep of medical education is of concern to many medical educators. Men and women students alike need relief.

The demand of our modern society for technically skilled personnel is insatiable. One is almost compelled to believe that there simply are not enough able young men available in our population to fulfill all the predicted needs for the most highly skilled, highly trained persons. An important source of additional persons in these categories is among the ranks of the bright, dedicated young women who are now in school but are very likely to stop studying long before they have attained their full potential for training.

Furthermore, not only does society need the skills of each young woman, but she will need the challenge and the stimulation of a worthwhile and demanding task. In tomorrow's "push button" world, she, her family, and her community will all be better off if she has a position that will utilize her capabilities completely. Medicine can provide these challenging careers for many women.

The Future of WMC

The future of The Woman's Medical College is exciting and full of promise. She has a vigor and a youthful outlook quite unexpected in view of her one hundred and thirteen years. Of course, there are difficult problems to be solved and much hard work to be done, but we are not pessimists who see these problems only as handicaps and obstacles; we prefer to look upon them as opportunities and challenges.

In meeting these challenges we are going to need the help of all who have stood by us so well in the past. We have a loyal and competent faculty and staff; each one seems to be doing two persons' work in space inadequate for one. The Board of Corporators is devoted to the College and works hard to advance its welfare. We can always depend on our loyal students and alumnae. Foundations and industry have been most helpful. Pennsylvania has taken an especially enlightened position in its program of financial assistance to the medical schools of the Commonwealth. The federal government provides indispensable assistance and support. Finally, I find that the College has a great army of supporters everywhere who can be categorized best as "good friends."

Under the wise leadership of a great lady, my predecessor, Dr. Marion Fay, the College has begun a significant program of progress. The faculty has been strengthened, the research programs augmented, the student body increased. This summer will see the beginning of another phase, a program of new construction and the rehabilitation of the old hospital building that will significantly improve the clinical teaching. The addition of beds and the provision of more and better space in which the faculty and students can work more effectively will begin to solve our most immediate problems.

The coming years will be busy ones for all of us. The work must go on—not to its conclusion, because there is no end when your goal is excellence—but go on in the continuing pursuit of the very highest quality of medical education. With the help of all our friends, this endeavor will succeed.

To Elton Mayo I am indebted for the realization that today we live in an adaptive culture, not a traditional one. What traditions have we to tell us the wise use of television, of jet planes, of atomic energy, of modern medical science? —Alan Gregg in *Challenges to Contemporary Medicine,* Columbia University Press, 1956, p. 84.

Some Aspects of the Legal Control of Pharmacy

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A few years ago one might have addressed himself to the subject of the laws regulating the practice of pharmacy with the full assurance that if he covered the Pharmacy Practice Act and related statutes, the state and federal narcotic acts, and the poison law, his review would be complete. Unhappily, this is far from true today, since we now seem to be regulated from almost every conceivable side.

Obviously I shall not be able to identify, much less discuss, all the numerous laws affecting pharmacy. Since my time is limited, I shall use it largely to discuss the Board of Pharmacy, which is the major legal regulating mechanism of the profession.

Derivation and Evolution of Authority

To view this subject in its proper perspective, it will be useful to consider briefly the derivation and type of authority that is employed to regulate the practice of pharmacy. I believe that this is important, in view of certain other types of authority that are coming into vogue and that are being used to regulate vocational activity—even in the professions. It should be recalled that the state exercises certain basic authority over its citizens: (1) the power to tax, (2) the power to require the bearing of arms, (3) police power, (4) the power to regulate commerce, etc.

During the formation of our republic, police power was reserved for the individual states. Legal tradition has since defined this power of government and identified it as the proper instrument to be used for the protection of the public health, safety, welfare, and morals. Other federal powers, however, are starting to challenge, or more properly to impinge upon, the traditional use of police power for the regulation of professional practice and privilege. The federal power to tax, as in the case of narcotics, and, more particularly the power to regulate commerce, as in the case of the Federal Food, Drug, and Cosmetic Act, are coming to be forces of increasing concern to both pharmacy and medicine. Except for a later brief mention of the power to regulate commerce, I shall consider only the police power of the state.

Legal control in North Carolina

North Carolina first employed this power to regulate the practice of medicine in 1859. In 1881, the state adopted its first Pharmacy Practice Act. This act created the Board of Pharmacy, set qualifications for those entering practice, provided for their certification by examination and registration, and outlawed practice by unauthorized persons.

As with nearly all other vocational regulation, the requirements for entry into and practice of pharmacy have been strengthened from time to time. The places of pharmaceutical practice were placed under regulatory control by the requirement for registration of pharmacies and drug stores in 1928. The evolution of legal control continued, often in opposition to economic pressures. In 1947, after a number of unsuccessful attempts to lower requirements for practice, the legislature declared the illegal practice of pharmacy to be against public policy.

Finally, in 1958, the State Supreme Court ruled on most of the important aspects of our pharmacy law (Board of Pharmacy vs Lane). Not only did the court deem these laws to be a valid utilization of the police power of the state, but it seemed to reaffirm the public policy on pharmacy as stated above. In addition, the court apparently considered the dangers inherent in the practice of pharmacy by those who have not demonstrated their competency to be such that it could sanction the Board of Pharmacy's power even to enjoin certain violations of law in addition to any criminal actions that might be instituted.

Adapted from an address delivered before the First North Carolina Conference on Medicine and Pharmacy, Durham, November 11 and 12, 1964.

Although there have been several changes in the pharmacy law since 1881, its basic philosophy remains the same—legal control (as differentiated from control through professional ethics) of professional practice by members of the profession.

A system of vocational regulation such as this comes under attack from various sources from time to time. In 1962 an attempt was made to place all of the examining and licensing boards under the supervision of what we call a political commissar. The professions united to oppose this move, and it was defeated. This was splendid cooperation, and the professions have no apologies to make—not even to the charge of self-interest—for, after all, there is no conflict between true professional objectives and the public interest. We pointed this out to the legislative committee hearing the proposal by saying, "Professional reward is not necessarily contrary to public interest and, more often than not, is the stimulus for higher achievement to the public's benefit.

The Board of Pharmacy—Responsibilities, Powers, and Policies

The regulatory agent of the pharmaceutical profession is the State Board of Pharmacy. In addition to its responsibilities to examine and certify candidates for licensure, it is obligated, through its secretary (who incidentally may or may not be a member of the Board) to enforce the pharmacy law, the state narcotic law (supplementing the responsibility specifically charged to the State Bureau of Investigation), the poison law, the barbiturate and stimulant drug law (again in cooperation with the SBI), the drug substitution law, and numerous miscellaneous statutes relating to drugs, covering some 57 pages, plus certain responsibilities shared with the Department of Agriculture for some 15 additional pages of the State Food, Drug and Cosmetic law.

In order that the Board might carry out its prescribed duties, it has been endowed with rather broad powers. Briefly stated, it may adopt such bylaws, rules and regulations, not inconsistent with the statutes, as it deems necessary to discharge the duties imposed by the act. The Board is also authorized to employ inspectors, chemists, and attorneys as it deems appropriate in the discharge of its duties.

Personnel

Membership on the Board is determined without consideration for party politics. Members are elected by the Pharmaceutical Association by mail ballot and certified to the Governor for commission. Representation is based on five geographic areas of the state, each of which has one member, elected for a period of five years and permitted to succeed himself for an unlimited number of terms.

The Board employs a full-time secretary-treasurer, who is selected by the members and who, although not so designated, is the de facto executive officer of the Board. (I am the third person to hold this position since 1881).

The Board retains an attorney and an assistant attorney. Normally it has a complement of two inspectors, although currently only one is employed. At present the Board has temporarily employed a full-time hospital administrator on a consultant basis. For the past 18 months he has been working on a project designed to improve pharmacy services in hospitals. Two secretaries, with temporary assistance during peak license renewal seasons, complete the personnel.

The Board holds regular monthly meetings (with the exception of August and December) in the Institute of Pharmacy, which is owned by the North Carolina Pharmaceutical Association. Examinations for license are held in June and February. Board sessions extend from one to four days, for which the members are paid a per diem fee of $10 plus actual expenses, as stipulated by the Legislature. (I believe I am correct in saying that the last pay raise received was in 1905.)

The Board's total activity is financed solely from the fees received for pharmacists' licenses and pharmacy permits and a token amount from examination fees. It receives no appropriation from the state or any other revenues.

Procedures

It was stated earlier that the secretary of the Board is legally responsible for the enforcement of the pharmacy law and related statutes. It would be highly inaccurate to allow this statement to stand on its face value. While the legal responsibility is his, he is assisted by the entire Board and its attorneys. Although the inspection staff is under the direction of the secretary, no cases are instituted without first having been thoroughly reviewed by the Board members.

All complaints are channeled through the secretary's office wherever they were originally filed. On the basis of facts established by the secretary or his inspectors and a resume of appropriate statutes in cases where a violation of law is alleged, the Board either dismisses the complaint or determines on an appropriate procedure to pursue it. When probable cause is established, the accused person is given the opportunity for a hearing before the Board.

The Board does not have the power of subpoena, and any individual may elect to ignore the citation without in any way prejudicing his case before a court of law. Persons testifying are not put under oath. For the record, however, a recording is made of the proceedings and can be used by the Board in any future prosecution or to support any other action that it might take.

The respondent may be represented by counsel, if desired, or he may present his own case. He may call witnesses or present any evidence he deems necessary in his own interest.

Having heard the case and satisfied itself that it has all the available facts, the Board may (1) dismiss the complaint; (2) issue a reprimand or letter of censure; (3) accept an affidavit of compliance, usually containing conditions of probation; (4) revoke the license to practice or the permit to operate a pharmacy (sometimes with a stay order amounting to a suspended sentence); (5) seek a restraining order enjoining any future infractions under burden of contempt of court; (6) institute a criminal action which may be in addition to the injunctive proceeding.

Safeguards

From the foregoing, some might infer that the Board of Pharmacy has set up a full-scale court and is usurping the business of the courts of law. This might even be interpreted as a dangerous development, and in this I would agree except for two factors: (1) there is nothing to compel an accused person to appear before the Board if he so elects (although a majority—about 99%—prefer settlement before the Board to court action); (2) regardless of what action the Board takes, the aggrieved person has the right of appeal to the Superior Court. Without this latter provision, I dare say, the Board would be reluctant to hear any but minor complaints. With these two safeguards, however, it feels secure in handling almost any of the problems coming under its jurisdiction. It also feels that, by virtue of its intimate knowledge of the subject material, it can do a better and more economical job, in terms of time and costs, than could the courts of law.

Review of the Pharmacy Practice Act

Dispensing of drugs

The procedure just outlined is adaptable to most of the enforcement activities of the Board, and particularly those involving pharmacists. Its major use, however, is in the enforcement of the Pharmacy Practice Act. A brief review of this law may be appropriate. Like medicine, the practice of pharmacy is restricted by law to properly qualified persons who are licensed by the Board of Pharmacy. G.S. 90-71 makes it unlawful for any but licensed pharmacists to *conduct* or *manage* any pharmacy or drug store or to *compound, dispense* or *sell at retail* any drug, chemical poison, or pharmaceutical preparation upon a physician's prescription or otherwise. There are, however, several exceptions to the latter provision:

1. Assistants who are not licensed pharmacists may perform certain acts as aids to the pharmacist, but only under his immediate, direct, and personal supervision.

2. A "legally registered practitioner of medicine in the compounding of his own prescriptions" is exempted under the law.

The question has arisen as to whether or not a physician may delegate the task of "compounding, dispensing and selling at retail" drugs and medicines to a nurse or aide in his office or a hospital. This question has been clarified by the Attorney General in an opinion based upon a decision of the Supreme Court. A part of this decision reads as follows:

> To answer your specific question, the exemption in the Statute, "Nothing in this section shall be construed to interfere with any legally registered practitioner of medicine in the compounding of his own prescription . . . ," permits the physician to dispense drugs to his own patients to meet the immediate need of that patient in the absence of usual pharmacy facilities (or in areas where pharmaceutical facilities do not exist) or in emergencies where drugs or medicines can not be acquired from the usual traditional sources. In my opinion, the exemption in the Statute applies only to physicians. I can find no exemption to the Statute which would permit the office nurse or attendant to compound, dispense, or to sell at retail drugs or medicines as an aid to the physician under his supervision or otherwise. Under such circumstances, consistent with the opinion of the late Attorney General A. A. F. Seawell, hereinbefore referred to, and which is supported by the Supreme Court in *North Carolina Board of Pharmacy v. Lane, et al,* 248 N. C. 134, the physician could not legally delegate to a nurse or office attendant the task of compounding and dispensing or selling at retail drugs or medicines. This, of course, should not be construed to mean that the Statute would in any way interfere with the nurse or attendant administering drugs to the physician's patient or in carrying out such other treatment procedures as the physician might legally delegate to such nurse or attendant.

Licensure

As with most of the professions, the minimum standards for entry into the practice of pharmacy are set by the legislature. At present candidates for licensure must be 21 years of age and satisfy the following educational requirements:

1. Graduation from a recognized school or college of pharmacy (defined as one which is accredited by the American Council on Pharmaceutical Education and whose program extends over five academic years).

3. One year of practical experience under the supervision of a pharmacist and not concurrent with school attendance. No experience obtained before completion of one year in college is accredited, and at least three months must be acquired after graduation.

4. Passing of an examination by the Board of Pharmacy. This examination covers five major areas and is given over a period of three days.

In addition to registering pharmacists by examination, the Board is empowered to grant licenses by reciprocity to licensed pharmacists in other states who have met North Carolina requirements. Such registration is effected through the National Association of Boards of Pharmacy, of which all state boards are members except those in New York, Florida, Hawaii, and California. These states do not engage in reciprocity.

Encroachment of Government Powers

I spoke at the outset about the several powers of government that have been used to regulate professional practice and privilege. I stated that tradition had placed this regulation under the police power of the state. My concern lies with the other forces of government that are gradually coming to be used for this purpose. For example, the power to regulate commerce was used to deny the pharmacist the right to exercise his professional judgment in renewing prescriptions under the requirements of the Federal Food, Drug and Cosmetic Act. The same power was used to abridge the physician's judgment in selecting the drug of his choice, as in the case of Parnate; and such abridgment will become more evident as the review for efficacy of all drugs now on the market gets under way, as provided in the Harris-Kefauver amendments. None of us should quarrel with getting ineffective drugs off the market. The danger lies not in determining what drugs are safe and effective, but in who will make the determination of efficacy—a federal bureaucracy or the medical profession.

While the clamor for the reorganization of total medical care doubtless originates in certain segments of our society and is augmented by a socially inclined government, economics is not the only force at work. Government bureaucracy is also trying to

secure, become entrenched, and expand its influence in society. We have seen how certain constitutional guarantees were manipulated to abridge property rights. This is just one step away from the use of the same guarantees to regulate professional privilege and practice.

It is incumbent upon all the health professions to study their weaknesses in the area of vocational standards and control and to make such corrections as the public interest demands. It is further encumbent upon these professions to resolve their differences and to unite in promoting the basic objective of profession: to serve public interest in all matters of health care. It is trite but true that we either stand together or we hang separately.

Fatal Pulmonary Phycomycosis Complicating Leukemia

A Case Report

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Reported cases of mucormycosis have increased in recent years with recognition of the potential pathogenicity of this normally saphrophytic order of fungi. In this paper a new case is reported and the recent literature is reviewed.

Case Report

The patient, a 36 year old white male textile worker, bled excessively after a tooth extraction in October, 1961, and was found to have acute granulocytic leukemia. He was first admitted to the North Carolina Baptist Hospital on October 3, 1961; the bone marrow revealed poorly differentiated granulocytic leukemia, and administration of 6-mercaptopurine was begun. There were two admissions for bleeding in the next two months, but on November 28, 1961, he was feeling well and the bone marrow showed evidence of remission. In February, 1962, there was no physical evidence of disease. This remission lasted 11 months while the patient was taking maintenance doses of 6-mercaptopurine.

In February, 1963, he was readmitted because of fever and bleeding. Methotrexate (4-amino-n^{10}-methyl pteroylglutamic acid) and prednisone were added to the therapy. Monilial stomatitis was treated with mycostatin suspension. His response was poor, and in March, 1963, methylguanyl-hydrozone hydrochloride (Methyl GAG) replaced the 6-mercaptopurine and methotrexate. There was roentgenographic evidence of lingular infiltration of the left lung; three months later this abnormality was less, but a hilar prominence suggestive of lymph node involvement had appeared.

In June, 1963, Methyl GAG was discontinued and the patient was started on hydroxy urea. He seemed to improve subjectively, but during the evening of July 21, 1963, he had an acute onset of hemoptysis with dyspnea.

Physical examination at that time revealed a chronically ill white male with a "moon" face, who was in moderate respiratory distress with active hemoptysis. Petechial lesions were generalized. The blood pressure was 120/70 mm Hg and the pulse 140. There were bilateral retinal hemorrhages, and thoracic examination revealed bilateral gurgling rales. The patient expired suddenly eight hours after admission.

Autopsy data

At necropsy, three hours post mortem, there was blood in the oral cavity and upper respiratory tree, and petechiae and ecchymoses were observed in the skin and viscera. There were 50 ml of fluid in both pleural cavities and 200 ml of straw-colored pericardial fluid. There was adherent, occlusive

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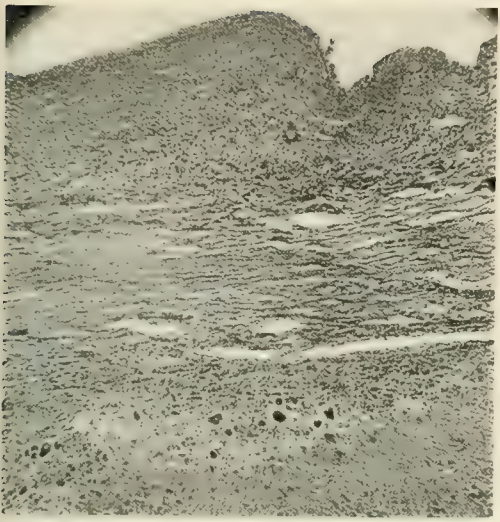


Fig. 1. Inflamed pulmonary artery with periarterial necrotizing granulomatous lymphadenitis. Giant cells are conspicuous. (Original magnification x 45. hematoxylin and eosin stain.)

dark red thrombotic material 3 cm proximal to the hilar bifurcation of the right pulmonary artery. Distally, the lung was mottled dark red, and the right main bronchus was filled with blood clots. The liver and spleen were enlarged to 1840 and 690 gm respectively.

On microscopic examination there were collections of anaplastic granulocytes in the bone marrow, respiratory diaphragm, testes, pancreas, lymph nodes, liver, spleen, pericardium, kidneys, lung, and the wall of the thrombosed pulmonary artery. Hematoxylinophilic, coenocytic hyphae permeated and apparently colonized the thrombotic material, and were scattered through the intima and the disrupted internal elastic membrane of the artery. In addition, there was associated arteritis and early organization of the thrombus. Focal ischemic necrosis was present in the upper and lower right lung lobes; in viable tissue there was pulmonary edema. There were hemosiderin deposits in the bone marrow, liver, spleen, and lymph nodes. The adrenals were of normal weight.

Postmortem cultures of cardiac blood and of the lungs were negative; fungal infection was not grossly anticipated and fungal isolation not attempted.

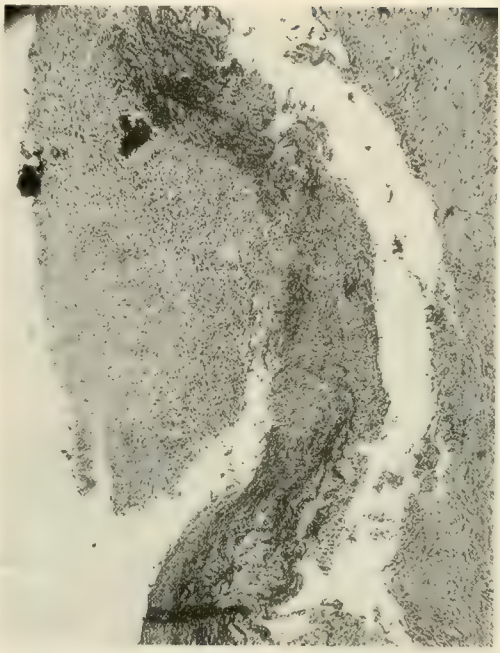


Fig. 2. Inflamed pulmonary artery with disrupted elastic (black) fibers. (Original magnification x 45. Verhoeff's elastic tissue stain.)

Comment

The first generally accepted case of mucormycosis in man was reported by Paltauf in 1885. Barthelet observed in 1903 that mucor is an invader of tissues previously altered by disease[10].

In 1956 Baker[3] described mucormycosis as a new disease in the United States. The fungus is easily seen on hematoxylin and eosin stains, yet before Baker's description few cases had been reported. He likened the increased incidence of mucor infection to the relationship between candidiasis and antibiotics.

Some fungal diseases such as coccidioidomycosis, histoplasmosis and blastomycosis are primary infections, while others such as aspergillosis, cryptococcosis, and moniliasis are secondary. Mucormycosis is a newcomer to the latter group and is unique in its acute course and fatal outcome.

The term *mucormycosis* refers to infection by a member of the order mucorales and class phycomycetes. They are common-

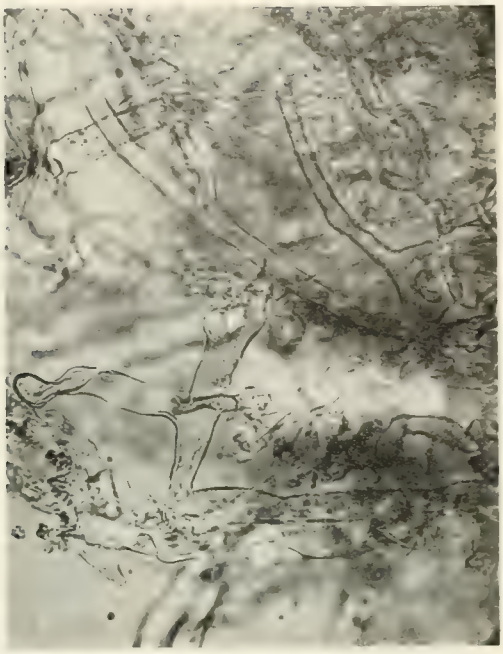


Fig. 3. Teased, unstained preparation of pulmonary arterial thrombus. The coenocytic (nonseptate) hyphae are finely granular and filamentous.

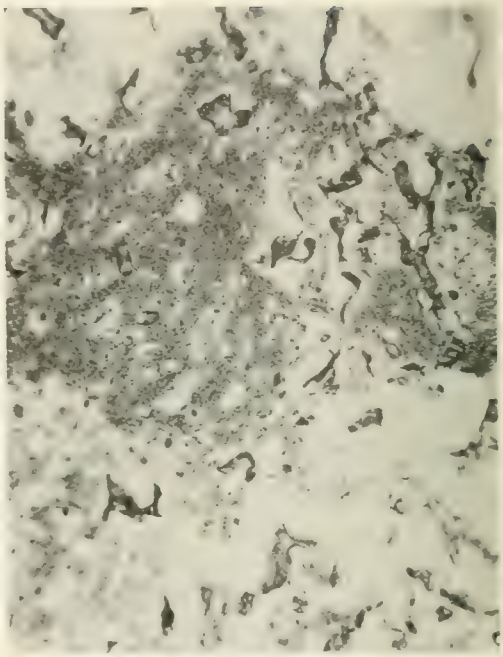


Fig. 4. Irregular, coenocytic hyphae abundantly scattered through the pulmonary arterial thrombus. (Original magnification x 450. Gold impregnation technique.)

ly known as bread molds or sugar fungi. The term phycomycosis was used to replace mucormycosis when it was found that *Mortierella, Basidiomycetes,* and *Hyphomycetes* can also produce the clinical picture of mucormycosis, although they are not of that family. All are nonseptate fungi of the class phycomycetes[14]. In man the three most common offenders belong to three genera of mucorales: mucor, absidia, and rhizopus. They grow in a few days on Saboraud's medium with nonmotile, asexual spores[10]. These fungi are found on normal skin and are common laboratory contaminants[8].

Phycomycosis is most often seen as a complication of systemic disease, and the most frequent predisposing conditions are diabetes mellitus and leukemia. Baker noted ACTH administration, cancer chemotherapy, and poor diabetic control to be predisposing factors[3]. Hoagland[8,3] observed that nearly every patient in the American literature had received antibiotics or antimetabolites prior to the onset of mucormycosis. This complication should be considered in any debilitated patient with a marked change in his condition, and especially on evidence of pulmonary infiltration or infarction.

The most frequent sites of secondary involvement are the lungs[7], brain[13], and paranasal sinuses[5], followed by the gastrointestinal tract[11] and subcutaneous tissues[1]. Apparently, the site of secondary fungal invasion is somewhat dependent upon the predisposing systemic disease[2]. The cranial form is more frequently associated with diabetes[10,12,5,13], while leukemia is associated with pulmonary involvement[7,10]. Baker, in 1962, reported 11 patients whose death was due to fungal infections. Six of these patients had pulmonary involvement secondary to leukemia; 10 had severe neutropenia, considered a predisposing factor to secondary invasion. The pulmonary form may present as pneumonitis or pulmonary thrombosis. The organisms penetrate the bronchial wall invading the hilar tissues, parenchyma, and vessels producing arterial throm-

bosis and subsequent pulmonary infarction[10].

Since patients with leukemia frequently have deranged clotting mechanisms, one does not readily think of thrombosis in this condition, but our case directs attention to vascular inflammation leading to subsequent thrombosis. The phenomenon of thrombus formation in patients with disorders usually associated with bleeding diathesis was referred to in a similar case reported by Mayfield[15] and termed "paradoxical thrombosis." A previous effort has been made to consider phycomycosis in the differential diagnosis of several serious vascular disorders: (1) cavernous sinus thrombosis, (2) thrombosis of the central retinal artery, (3) occlusion of the major branches of the abdominal aorta, (4) bacterial endocarditis, (5) myocardial infarction, (6) pulmonary infarction, especially in patients previously febrile and severely acidotic, or treated for a hematologic disorder[14]. The peculiar affinity of the phycomycetes for vascular tissue remains unexplained.

Amphotericin B offers therapeutic promise. Burrow reported a diabetic in acidosis with severe sinusitis due to rhizopus who responded to amphotericin B[6]. Localized areas such as a lobe of a lung or portion of skin may be resected.

Summary

A case of fatal pulmonary phycomycosis developing in a patient with acute granulocytic leukemia is reported. A brief discussion of the pathogenesis is presented with autopsy findings and illustrations.

Acknowledgement

The authors are grateful to Drs. Charles Spurr and Modesto Scharyj for their advice in the preparation of this paper.

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The real competition will come, it seems to me, not between private practice and socialized medicine but between voluntary prepayment plans and socialized medicine. I speak of the bulk of medical practice, for private practice will continue, as private schools and colleges have continued despite the competition of socialized education, more commonly referred to as our glorious American public school system. Moreover, private practice will continue, and hospitals for private practitioners and private patients will continue, for reasons comparable to the reasons that keep private schools, colleges, and charities alive and, as I think, invaluable.—Alan Gregg in *Challenges to Contemporary Medicine,* Columbia University Press, 1956, pp. 68-69.

Psychiatric Facilities in Community Hospitals

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The public view of mental health problems has broadened dramatically in the past century. In 1925 the North Carolina General Assembly passed a resolution which stated, ". . . it is expedient to establish and endow a lunatic asylum in the State." This was the extent of explicit public interest in mental health at that time. Now there is concern not only with traditional psychiatric disorders such as brain syndromes, psychoses, and psychoneuroses, but also with such obvious public health problems as school dropouts, illegitimacy, delinquency, draft rejections, learning problems, alcoholism, mental retardation, psychologic aspects of aging, and many other psychosocial ills.

The 1825 resolution implied a somewhat contradictory but natural combination of the emotions of sympathy and fear, anger and guilt; in part this led to the delineation and recognition of only a small segment of the mentally disturbed in our midst—those with the most dramatic deviance. These unfortunates, then called lunatics, were thus isolated, encapsulated in legal strait jackets, and geographically pooled to form our state mental hospitals. This action reflected the prevailing mixed feelings of the time—legitimate concern mixed with fear, sympathy, anger, guilt.

Such an attitude is no doubt reprehensible in retrospect; nonetheless, it was the beginning of public recognition of, and a professional attack on, mental illness in North Carolina, a milestone in the medical history of the state.

Mental Health and Privacy

Mental health defies accurate definition partly because it is a private matter; and, like other private issues, we tend to keep it hidden. The human animal tends to cover, keep from sight, or even completely deny the existence of matters of great personal sensitivity, symbolized in the Bible story that tells of the donning of the fig leaf. In the process of personality development, during the first five years of life a person learns how, when, and where to put on clothes; and the rest of his life how, when, and where to take them off. Clothes may be worn for their basic use, to provide protection and comfort, but a psychologic counterpart exists as well. The function of personality is like that of clothes, and the deeper symbolic meaning has evolved to become of paramount importance: to hide and cover up what we are ashamed of or to "dress up" that of which we are proud.

This function also has a sociologic counterpart. The enormity, multiplicity, and complexity of mental health problems tend to encourage a cover-up attitude among us as a society. The denial mechanism is evident in the way in which we once handled our mental health problems, denoted by the term "lunatic," in the last century. The establishment of large state institutions, though good in intent, became an example of pathologic denial as more and more people were "sent away."

The pooling of the mentally ill has now reached such great proportions that denial becomes very difficult, if not impossible. Perhaps partly for this reason, society is now willing to cast off the cloak of denial and look at its mental health problems more squarely and inclusively, with a perspective which involves strong motivation toward action for mental health and against mental disease. If public awareness can be extended to public understanding, the potential for purposeful action seems boundless.

Current Advances in Psychiatry

Since this small but significant beginning in the provision of psychiatric services in the last century, there have been great advances in biology pertinent to the field of medicine and psychiatry. Great insights into the function of molecules and cells have been elucidated, the most dramatic, perhaps,

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being the recent advances in the field of genetics. Further, largely through the psychoanalytic movement, we have gained important insights into our intrapersonal, or intrapsychic, operations; this knowledge has come to be called the science of psychodynamics. Beyond this, the interpersonal perspective has given an enormously clearer view of family dynamics and other social interactions.

With this foundation we have gained enough courage to broaden our horizons even further, to deepen our concerns more profoundly, and to obtain a scientific and clinical perspective which encompasses the totality of our complexity. Finally we have come to respect and explore what might be described as the "transpersonal" or, as it is more popularly known, "the community." From biology, psychology, and sociology, new insights and formulations are synthesized into a new hope for human understanding. From this vantage point we seek an understanding of the "anatomy" and "physiology" of the community, to know its "pathology" and "pathophysiology" (i.e., epidemiology), and to devise corrective methods for its ills.

Comprehensive Health Care and Community Hospitals

Logical community planning for services is crucial. As planning for mental health programs gets under way, it becomes clear that there is great need for communities to assess overall health, as well as mental health, needs and resources. Indeed, we need to assess in a broader way the multi-faceted health-education-welfare complex, which has become so fragmented and compartmentalized in our society.

The general hospital, the medical practitioners, and the county health department are the foci of health service in the community. The function of the hospital heretofore has been limited to acute treatment; this was its primary focus, and essentially its public image. It would appear that the hospital usually commands a degree of community respect which makes it an appropriate focus for extension of its functions, in cooperation with other health and health-related agencies, in the development of comprehensive medical programs, including all phases of health care: promotion of health, preventive medicine, early detection and treatment of disease, rehabilitation of the handicapped, and continued care of the chronically handicapped. This concept broadens the responsibility and concern of the hospital to participate more meaningfully in total community health. In a word, it approaches the ideal of a community health center incorporating the total health of the community in its concern and, potentially, in its function. Many contend that the community hospital is the foundation on which a total community health program can logically be built. More specifically, the community hospital is the appropriate center for the short-term diagnosis and treatment of psychiatric illness at the very least. This brings us to the specific segment of the health-education and welfare complex relevant to this paper, the psychiatric service in the general hospital.

Problems

The rationale for including a psychiatric unit in a general hospital is that psychiatry is a medical specialty which is concerned with a segment of problems called mental health and illness; as a specialty of medicine, it is a responsibility of all health professionals. Many legitimate questions arise, however, and these need clarification and understanding. Is such a unit feasible? What should be the physical plan? How does it differ from an ordinary medical service? Can we afford it?

Patient management

For ward management the basic principles of hospital care apply. The personnel must be competent persons with adequate basic training, which may not necessarily be formal or extensive but should be continuing. Psychiatric nurses who are sensitive to patient behavior almost preclude disturbances which disrupt hospital care of others. With appropriate awareness and concern on the part of all personnel, together with the judicious use of drugs, the psychiatric ward is a pleasant, safe, and salutary environment. Tensions which inevitably arise among patients and personnel may be

effectively handled through psychiatric consultation.

Regular rounds and ward conferences allow maximum use of personal skills to make the ward society a part of the treatment itself. The personal and social skills of the staff are sharpened to handle difficult intrapersonal and interpersonal conflicts so that they are used as corrective influences. Continuing training programs offer opportunities for increasing interpersonal sensitivity, so that alternative management methods become a part of the clinical operation of each member of the psychiatric team.

But where will qualified personnel come from? The supply of psychiatrists is limited, and other physicians are often uninterested or unskilled. Nurses are sometimes available but not trained in psychiatry. What about other mental health specialists?

There are no ready-made answers to these questions; however, certain guidelines may be helpful. In an urban area trained physicians, nurses, psychologists, and social workers as well as rehabilitation workers and technicians are becoming available. In a nonurban area, professional persons in the community can be trained either on the job or in special programs in nearby psychiatric hospitals and centers for the retarded or in the university centers.

The principle of "growing your own" has worked in many settings. An interested and motivated nurse may be oriented and given continuing inservice training so that she becomes skilled as a psychiatric nurse and as a supervisor and instructor of aides and other assistants. With the latter, the principle of utilizing and developing available resources is again of primary importance. Granting that the personnel problem is a big one, it is not insurmoutable. We began surgical services before there were enough surgical specialists—physicians or nurses. The same is true of psychiatry and other services which are a part of general medicine.

Physical facilities

What about the physical plan of a psychiatric unit? Will its cost be prohibitive? Necessary variations from the usual hospital ward need to be considered. Generally, psychiatric patients are ambulatory, and special medical or surgical nursing provisions are not routinely necessary, although toxic conditions are common enough to make it essential to have these services available nearby. Of particular importance is the provision of adequate space for conferences, consultative offices, and group activities. Bedrooms which can be utilized as sitting rooms or alternatively as offices are of value.

What about the operational expense of a psychiatric service? Is it not beyond present resources? It has been demonstrated repeatedly that the operation of a psychiatric service in a general hospital can be financially gainful. Insurance coverage for psychiatric illness has been broadened greatly in recent times. With the provision for indigents and medical indigents through government aid, and with increasing insurance coverage, the financial prospect is bright. Already, Vocational Rehabilitation funds have been enormously helpful in financing short-term hospitalization for both evaluation and treatment.

Summary

It has been demonstrated that the establishment of a psychiatric service in a general hospital is medically and financially feasible. The pattern by which this service is provided may vary with local conditions, and experimentation is badly needed; however, if the general hospital is to provide comprehensive medical care, the psychiatric department is a logical development to complement other services and fulfill a well-recognized community need. The public demands that these services be made available.

The community hospital is becoming a pivotal force in the development of mental health programs, unique in its potential for mental health concern, mental health planning, and in adequate provision for the management of certain mental health problems.

The Ethical Implications of Changing Patterns Of Medical Care

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Lexington, Kentucky

"Organization serves man and rules him, increases his scope and and hems him in."
John W. Gardner[1]

Medicine involves a complex of relationships grounded in mutual trust and regulated by principles designed to protect the person of the patient. Despite the necessary and increasing intrusion of institutions, health teams, and machines, the personal dimension of medical care will always remain. Any change in the pattern of patient care or in the roles of physician and nurse must, therefore, carry important ethical implications.

Advances in contemporary science, technology, and social structure are creating profound alterations in patterns of medical care. Pressure is mounting for the adaptation of traditional responsibilities so that patients may receive the full benefits of new knowledge. Yet a critical assessment of traditional roles is needed if the new knowledge is to be exploited fully. A better definition of the potentialities of each of the rapidly proliferating health professions awaits whatever realignment of relationships are made in the central triad created by the patient, the nurse, and the physician.

Both medicine and nursing may fear that changes in established patterns of practice will threaten traditional values and ethical standards. But the threat will be greater if the professions do not conscientiously refurbish their functions before the requirements of contemporary knowledge.

Ethical Codes of the AMA and ANA

Whenever long-cherished convictions are challenged, some reasonably firm bench marks must be established. The ethical principles and codes of the medical and nursing professions constitute an appropriate base for both decision and action. The doctor and the nurse, as well as the public, must re-examine each current and proposed change in the mode of providing medical care. To what extent will the ethical codes of each professon modify and be modified by the current demands for revision?

The famed oath of Hippocrates has been the moral standard of western physicians for centuries. In 1847, the first year of its founding, the American Medical Association adopted its first code of medical ethics, patterned on that of Sir Thomas Percival, published in England in 1796.

The current revision of the AMA code was adopted in 1957. It reduces to ten admirably clear and brief paragraphs all the essential principles contained in the former codes. These paragraphs enjoin the physician to merit the confidence of his patient, continually improve his skill, practice scientific medicine, expose the unethical practitioner, uphold the honor of the profession, seek consultation, keep confidential information, charge reasonable fees for services actually rendered by him, and to avoid self-advertising and working in situations which would hamper freedom of judgment[2].

Ethics and etiquette

These codes, and the more ancient ones from which they derive, are an admixture of ethics and etiquette. Ethics deals with the rightness or wrongness of the physician's actions in the light of principles stemming from the nature of man as a person. It establishes normative guides which govern specific situations in such a way that the rights of the patient are always preserved. Professional etiquette, on the other hand, deals with matters arising out of the relations of physicians with each other and with the dignity of the calling.

The public has never found it difficult to understand the truly ethical principles which assure high standards of service and

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Adapted from a paper read before the First National Conference for Professional Nurses and Physicians, Williamsburg, Virginia, February 14, 1964.

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devotion. The proscriptions relating to the conduct of physicians with each other are less clear, and are sometimes erroneously interpreted as self-protective devices. The ban against advertising, the physician's work conditions, the manner of payment, fee-splitting, the courtesies of consultation, and the advancement of public health are not strictly matters of ethics. Their violation may impair the dignity or some of the goals of the profession, but they do not by nature involve usurpation of the human rights of the patient.

The revised code of the American Nurses Association contains the same intermingling of etiquette and ethics[3]. A fair number of its 17 statements are concerned primarily with the dignity and prerogatives of the profession rather than with the rights and duties flowing from the human nature of the patient. For example, being a good citizen, participating in nursing organizations, in legislation, and establishing terms of employment are exemplary ends in themselves but they are independent of the direct duties owed to the patient.

The truly ethical core of the codes of both professions derives from the dignity and rights of the patient as a person. This is the criterion against which new arrangements must be measured. Any changes that derogate or compromise these principles are unjustified. The etiquette of the professions, on the other hand, could be altered materially if such changes allowed for better services to the patient.

The code of the AMA says little about interprofessional relationships except to warn against association with anyone who does not practice medicine based on scientific principles. The ANA code is somewhat more specific. It requires the nurses to assume responsibility for both "dependent and independent nursing functions," specifically forbids the delegation of nursing functions to unqualified persons, enjoins harmonious relations with physicians and other members of the health team, and states that the nurse must not participate in unethical procedures herself and should expose the unethical or incompetent conduct of others.

Even on close examination nothing can be found in either code that would countermand a realignment of roles. Rather, each code, devoted as it is to the good of the patient, implicitly imposes on each profession the duty to explore all possible avenues which might improve the technical and personal services rendered the patient.

What are some of the current tendencies in patient care, those in operation and those certain to be expanded as each health profession attempts to adapt to the responsibilities imposed by current advances in biology and medicine?

The Team Approach

One adaptation in medical care necessitated by specialization and the need to approach patient needs comprehensively is that designated by the much abused word "team." Whatever we choose to call it, the cooperative activity of physicians, nurses, and other health professionals is a patent necessity in optimum care today. It is indispensable if the preventive, rehabilitative, and psychosocial dimensions of care are to be developed equally with the curative.

There are obvious ethical problems and problems and dangers in any team arrangement. The tendency to diffuse responsibility is great. The competence of a group instead of an individual must be insured. Tasks must be delegated discriminatingly to those most capable of performing them. The difficulties of supervision are in direct proportion to the size of the team, as is the threat to mutual trust. Most important, the person-to-person relationship is threatened.

Yet these difficulties must be overcome, for the physician can no longer care for his patient alone. To satisfy the ethical imperatives of his profession, he today faces new duties. Few would challenge his role as captain of the health care team—as *primus inter pares*. As such, he has two primary tasks: to bring the highest degree of scientific competence to his task and to develop his skill as a coordinator. He must recognize his limitations, appreciate the skills of others, and be sensitive to his patients' need for services other than his own. On the other hand he is responsible for the competence of those to whom he delegates functions. He should consult his team associates. He must recognize that his role is sometimes primary


A vine, someone said, is like the human mind - always reaching out for new things to grasp.
PROGRESS...
One way or another people will seek out new ways to cope with old problems. Yet progress must be wisely guided. One doctor says: "The desire of the public to have prepayment medical protection is so urgent that it will buy this protection from whatever plan seems most enticing. Whether you like it or not, prepayment medical care is here to stay. Let us support the system which is voluntary and over which we have adequate control." BLUE SHIELD
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$200.00	Up to $40,000.00	$5,000.00	$196.50	$147.50
$150.00	Up to $30,000.00	$5,000.00	$148.50	$111.50
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$250.00	Up to $50,000.00	$5,000.00	$292.00	$219.25
$200.00	Up to $40,000.00	$5,000.00	$234.50	$176.00
$150.00	Up to $30,000.00	$5,000.00	$177.00	$133.00
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and sometimes secondary, and that it varies with the phases of the patient's illness.

Nurses, social workers, and other personnel are professionals in their own right. The physician cannot justly control their clinical operations. As the ANA code points out, the nurse is responsible for both "dependent and independent functions." She is obligated to refuse to participate in actions she deems unethical, harmful to the patient, or against his interest. This is true of other members of the health team.

How do we reconcile this fact with the physician's role as coordinator? Obviously he must yield some of his individualism and accept the discipline of a conjoint effort in which he is the leader but without absolute prerogatives. But so, too, must the other health professionals, if the physician-coordinator role is to have real meaning.

Delegation of Responsibilities

The nurse, the aide, the technician, and others have recently assumed some of the technical tasks formerly belonging to the exclusive domain of the physician. One of the critical decisions for medicine and nursing is whether this assumption of technical tasks is the best direction in which to expand the role of the nurse. I prefer to consider such functions a limited part of her contribution. She should undertake them only when her training makes her the most competent person to perform them, or when they lead to better rapport with the patient.

Answers to specific ethical questions will depend upon the determinants in each actual situation. What is the physician's responsibility as coordinator as he delegates some of his technical functions? The tasks yielded up must not be regarded simply as prerogatives given to someone else. They are rather divisions of labor required for the good of the patient and made necessary by the complex structure of the hospital.

Any reassignment of tasks can be properly decided only by joint discussion; they must also be accepted as the moral responsibility of the person who assumes them. The ethical principles that protect the patient must remain operative.

The nurse or any other member of the health team who assumes technical duties must be held morally responsible for maintaining a high degree of competence in their performance. She must answer to the authority of the institution and to the coordinator for failures. Such failures can no longer be considered as exclusively those of the constituent professions. They are mutually shared and must be mutually considered and dealt with.

This implies the need for mutual criticism. There is an urgent need, deriving from the welfare of the patient, to make these criticisms constructive rather than destructive if the physician and the nurse are to share responsibility more closely.

The same ethical questions which concerned us in our consideration of the team obtain in situations where technical functions are parceled out to others. The physician must be assured that the techniques are being competently carried out. His traditional concern for the welfare of his patient must still be primary even though he shares his care with many others.

There is currently great interest in recapturing and expanding the nurse's opportunities for close contact with the patient. This trend is vital, since the time the physician can spend with his patient is decreasing lamentably. He is asked to master more scientific information, coordinate the efforts of other health professionals, interpret vast amounts of technical data, and assume a larger role in institutional affairs. To assist him he will increasingly need someone who is in close contact with the patient, who understands the diagnostic and therapeutic plan, and who can make pertinent observations in the light of that plan and suggest ways of improving it. He will also need help in interpreting his plan to the patient and in detecting and managing the psychosocial aspects of the case. The nurse who can perform these functions will greatly enhance the patient-physician relationship and facilitate delivery of optimum medical care.

In any new system of patient care, a first requisite is to examine the whole process of delegation of responsibilities. The usual procedure is to multiply tasks and techniques and then find people to perform them. A more fruitful approach would be to look at the tasks themselves in the light of

the patient's real needs without regard for who does them now. If we think in terms of functions to be filled rather than professions to be satisfied, the results might be better.

Relations with the Hospital

In the past 50 years physicians and nurses have become increasingly a part of the bureaucratic life of the hospital, with an attendant loss of autonomy. The advantages of this association to the patients are obvious, but there has been insufficient exploration of the ethical principles which should guide physician and nurse in their relations with the hospital and its administrators. Each group avows an interest in the welfare of the patient, but with divergent points of view.

A whole new set of responsibilities and duties derive from this association. As the sociologists have pointed out, the hospital is an important part of the therapeutic milieu[4-6]. It seriously influences the patient's recovery as well as his acceptance and understanding of illness. The interprofessional relationships within the hospital is a significant factor in its therapeutic functon. Each profession should resolve jurisdictional problems or problems of status which adversely affect patient care.

Hospital trustees and administrators, in turn, are charged by society with the legal responsibility for the extent and quality of care provided. They cannot entirely delegate this responsibility to the professional staff. Nor can they morally impede the work of the professional who wants to serve his patient to the fullest possible extent.

A more meaningful interchange between trustees, administration, and staff on the institutional philosophy of patient care, control of its quality, and adequacy to meet community needs is necessary. The hierarchy of values has to be weighed in any situation in which conflicting goals are encountered. The acceptance by medical staffs of institutional policies regarding patient care implies some adjustment of individual practices to those requirements.

The emotional charge of such an interchange can be held in check only by keeping the patient in the center of the picture. He is identifiable to all the participants—and independent of the status, prerogatives, and vested interests of any.

Summary

Nothing in the ethical codes of the nursing professions in any way countermands actual or contemplated changes in the patterns of medical care. Each explicitly enjoins behavior which will serve the patient's welfare and preserve his dignity. Each also includes rules of etiquette which guide relationships between members of the profession and are designed to insure the dignity and integrity of that profession.

Rather than banning reassignment of roles in medical care, each code, by its insistence on the good of the patient, compels each profession to explore fully every possible avenue for improving service even when this means yielding professional prerogatives. Hopefully, the nurse-physician relationship can become an example to all who today are earnestly trying to apply contemporary knowledge to their patients in a personal and competent manner.

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Report from the Duke University Poison Control Center

Jay M. Arena, *Director*

The causes of poisoning are many—accidental and deliberate, civilian and industrial. There are far more than a million incidents of some form of poisoning each year; in addition there are many which go undiagnosed and unreported. The successful battle against accidental poisoning requires the efforts of all the health and public serv-

ices of the community, the physician being the key member of the team. Every physician, therefore, must be made aware of his responsibilities, and do his share in preventing these tragic accidents.

The Duke Medical Center Poison Control Unit has been serving the health and lay personnel of this area since 1954. The aim of the Center is: (1) to treat, (2) to inform, (3) to continue research in therapeutic and preventive measures, and (4) to educate both the medical and lay public in the prevention and management of poisoning. The last aim is perhaps its most important goal.

In order to carry out this last function more completely, it has been proposed that the Duke Center be developed into a "Master Unit," so that its full teaching potential can be utilized. This can be done by:

A. Liaison with public health personnel throughout the state regarding (1) information concerning new or recent types of poisoning and new therapeutic methods, and (2) local reporting and follow-up of individual community cases. In addition, it would enable us to use more fully the services of the local health departments in reaching the individual families of poisoning victims to ascertain the why and how and to help with prevention.

B. Site visits to the Duke Poison Control Center for detailed study of case reports, technique, equipment, etc., by those interested in learning more about how to handle the problem of poisoning.

C. Providing information for local communities to establish their own poison control centers.

D. Local visits to other North Carolina communities by Duke Center officials for consultation, discussion, and assistance.

E. Providing appropriate educational material for specific and general use for medical personnel and lay groups.

We invite and welcome all physicians, public health offices and nurses, and lay groups to make use of these services, and report all unusual incidents of poisoning to the center by phone, wire or letter.

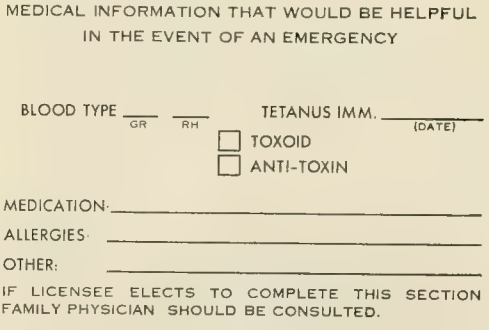
Report on Trauma*

THE NEW NORTH CAROLINA DRIVER'S LICENSE

Every physician has, at times, been called upon to treat an unresponsive patient where pertinent medical information is not available. With the increasing number of road accidents, such incidents will probably become more frequent.

Recently the Department of Motor Vehicles began to issue a new driver's license. The new license is a folded card presenting four sides. At the request of the North Carolina Chapter of the American College of Surgeons Committee on Trauma, Commissioner Scheidt very graciously made available side three of this new license for pertinent medical information.

Side three of the new license is reproduced here, with the permission of the Commissioner, to familiarize all physicians with this innovation (Fig. 1).


MEDICAL INFORMATION THAT WOULD BE HELPFUL IN THE EVENT OF AN EMERGENCY

BLOOD TYPE ___ ___ TETANUS IMM. _____
GR RH (DATE)

☐ TOXOID
☐ ANTI-TOXIN

MEDICATION: _____

ALLERGIES: _____

OTHER: _____

IF LICENSEE ELECTS TO COMPLETE THIS SECTION FAMILY PHYSICIAN SHOULD BE CONSULTED.

IBM 055748

Fig. 1. Side three of the new North Carolina driver's license.

It is to be noted that, short of a statutory requirement, this space for medical information can be completed only if the licensee so desires. The Committee on Trauma and the Motor Vehicles Department would like to urge all physicians to call to the attention of their patients the value of having such information readily available and to aid them in properly completing these spaces.

*This is the twelfth in a series of articles submitted by the North Carolina Chapter of the American College of Surgeons Committee on Trauma.

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FEBRUARY, 1965

THE MIDWINTER EXECUTIVE COUNCIL MEETING

On Sunday, February 7, 1965, the regular midwinter meeting of the Executive Council was held, the time when programs and problems are brought up for attention, and in preparation for the Society's May meeting in Asheville. In looking at the editorial concerning last winter's meeting, it is interesting to note how many of the items brought up at that time have come to pass, notably the implementation of Kerr-Mills legislation. This report cites only a few of the many (over 60) items discussed. The "Transactions" will contain a full account.

Reporting for the Committee on Legislation, Dr. Beddingfield said that the State legislative session was in too early a stage to define the bills of medical interest which would probably be considered. There may be a proposal to rewrite the law regarding the postmortem disposition of one's body, or parts thereof, in the light of growing attention to the use of tissue transplants from such sources. The Nurse Practice Act may receive attention from parties interested in its revision. Possibly the introduction of physician's fees into the Kerr-Mills legislation will considered.

On the national legislative scene the probable passage of social-security-type medical legislation was mentioned, including the fact that compulsory inclusion of self-employed physicians in the social security system is part of the pending bills. It is likely that the bill which comes out of Congressional action will not be exactly as introduced. The AMA will match funds spent by the Society on publicity for its "Eldercare" alternative plan, up to maximum of $2.50 per member.

Drs. Richard Kelly and Theodore Scurletis, reporting for the Committee on Child Health and Poliomyelitis, said that all 100 counties will have taken part in a polio drive by the end of February, 1965. At that time over 2 million persons, representing about 65% of the state's population, will have received the Sabin vaccine. Reports will be gathered and the final figures publicized as soon as possible. Should legislation be proposed to deal with the "battered child syndrome," the Society's position will be that reporting of suspected instances by physicians should be permissive, not mandatory; and the law should protect the physician from legal action against him for such reporting, so long as no malice is involved. This position corresponds to the current opinion of the AMA, which has studied legislation in other states and continues to feel that mandatory reporting is potentially harmful to patient and physician alike, since it may keep parents from seeking attention for a child.

Interest has been expressed in legislation to make screening of newborn infants for phenylketonuria (PKU) a requirement. However, the State Board of Health is studying a voluntary program which would

screen not only for PKU but for a number of other inborn errors of metabolism, at a fraction of the cost of the Guthrie test for PKU. The latter had tacit approval of the executive council. Also under consideration is a plan to encourage immunization programs for children by including questionnaires with birth certificates when they are mailed. Parents would be encouraged to take their child to their family doctor, and public immunization facilities would not be mentioned. Legislation regarding immunization is already on the books, but its effectiveness is questionable. No action has been taken regarding legislation prescribing standards for the day care of children. This matter was acted upon by the committee three years ago, in the belief that the profession had a responsibility in this matter which might be assumed by some nonmedical agency.

The subject of sex education in the public schools of the state is under consideration by the Committees on Maternal Health and School Health. It was noted that textbooks currently in use are almost devoid of information in this field, and that attempts to teach the subject in various schools have met with objections from parents, in some cases causing teachers to be dismissed. The Society has approved the teaching of the subject in the schools, and attempts will be made to implement this policy with due regard for the various factors involved.

Dr. Henry O'Roark of the Bowman Gray School of Medicine described the operation of the Forsyth County Family Planning Clinic, attributing its initial success to the inclusion of the county health department in planning the program.

Dr. John Truslow appeared to give a progress report on the work of the Medical Center Study Commission, established by the 1963 legislature but actually working only since October, 1964. This group has interpreted its assignment as the assessment of some of the need for medical and paramedical personnel in this state, rather than solely the study of establishing another medical school in Charlotte or Greenville. Dr. Truslow has concentrated on a few professions rather than diffusing his efforts, and feels that time has been too short to draw any conclusions. He hopes to have a report for the May meeting.

* * *

DRUG REACTIONS

All drugs make some people ill. Some drugs help some people to get well. Ideally we should use only drugs that aid at least some people in getting well, and choose from among them the ones which make the smallest possible number sick. Since even eating is only palliative—for we all must die—there is no ideal medication. Dr. Gray's paper, in this issue, deals with antibiotic reactions observed in pediatric practice, a type of treatment problem which poses many niceties of judgment for the physician. The difficulty and expense of getting laboratory confirmation of diagnoses, plus the time lost while the laboratory tests are being done, make it necessary to start treatment on the basis of clinical judgment in many cases. Knowing the possibly dangerous side effects of antibiotics should temper one's enthusiasm for beginning treatment, and once having begun, should sharpen one's perception of early signs of a reaction.

* * *

THE LADIES

Somewhat more than half the population of the world being women, we can find no excuse for overlooking them. Even if we continued to try, they would pay no attention, nor should they. The medical profession did its best to forget them, and women were being trained as astronauts (by the Russians) before they were admitted to some medical schools in the United States. Those restrictions are gone forever, and the new attitude is exemplified by the ideas of Dr. Glen Leymaster, expressed in his paper in this issue of the JOURNAL, and representing his inaugural address as president and dean of the Woman's Medical College of Pennsylvania.

It is perhaps not entirely unrelated to his present post that Dr. Leymaster was formerly chairman of the Department of Preventive Medicine at the University of Utah School of Medicine, for the same qualities which made him proficient in that calling

find application in his new position. The arrangement of many of our public activities is unsuited to the special needs of women, resulting in much waste of expensive education and, most particularly, of intellectual qualities which cannot be measured in terms of money. Dr. Mary Bunting, a member of the Atomic Energy Commission, on leave as president of Radcliffe College (and the widow of a pathologist), is among the many who insist that women should take the place in society to which their brains and education entitled them, and that to do so does not necessarily mean abandoning their traditional role as wife and mother. Once the children have been reared to a point where they no longer need full time and attention, mothers can return to their careers with harm to none and benefit to society, which has in many cases invested a great deal of time and money in their education.

It will be interesting to watch the changes in medical education in Dr. Leymaster's institution in the years ahead, and to see their influence on the education of women in the other schools, where they are outnumbered by men. We wish him luck (and money)!

Constitutional Amendments Proposed for May Meeting Action

The portion of the minutes of the 1965 meeting dealing with a proposed constitutional amendment is printed below. This material constitutes the required publication of a proposed amendment.

"Motion that this Council approve and ask the House of Delegates to further approve a change in our Constitution and By-Laws which would make it possible for any person who meets the specified requirements for membership to be granted such membership in this Society, as active members". (The motion was duly seconded, discussed and, upon vote, carried.)

The Executive Council of the Medical Society of the State of North Carolina, May 2, 1964.

The above action of the Executive Council was read before the House of Delegates in Greensboro, May 3, 1964, by President John S. Rhodes, whereupon, Speaker John C. Reece recognized delegate Dr. George W. Paschal.

"DR. PASCHAL: I would like to speak to the Council's recommendation.

"In order to implement the recommendations of the Executive Council and in compliance with the provisions of the Constitution and By-Laws, Article XIII, regarding amendments, I present the following specific amendments to the Constitution and By-Laws:

"These, I understand, require no action today but are to be considered for final approval at the next Annual Meeting.

"The amendments proposed are, as I will read them.

"To amend Article IV of the Constitution and By-Laws by striking out the words 'Scientific Members' in Section 1.

"Two, by striking out the words 'other than Scientific Members' in Section 2.

"And, three, by striking out Section 8 entirely.

"And to amend the By-Laws as follows:

"By striking out the words 'or Scientific Members' in Chaper I, Section 1, and inserting the word 'or' between the comma and the word 'affiliate'.

"Amend Chapter XII, Section 1, by striking out the words 'and Scientific Members'.

"Amend Chapter XV by striking out the word 'white' in line five of Section 5 and striking out the semicolon and the portion of the first sentence after the word 'members' in line 7 and inserting a period after the word 'members'.

"And, finally, by striking out the last or the remainder of that particular sentence.

"I would like to confirm my impression that this is the only action by asking Dr. McMillan, the Chairman of the Committee (on Constitution and By-Laws), if this is the appropriate interpretation. (Dr. McMillan affirmed the action as exactly right.)

"SPEAKER REECE: The Chair interprets this as being presented officially to the House of Delegates in an open Session".

Done in the HOUSE OF DELEGATES meeting in Greensboro, May 5, 1964.

President's Page

Committee Structure and Function

Committees are often derided and no doubt with just cause since those not closely supervised can easily become top-heavy and inefficient. Any organization with many detailed operations however, *must* have an efficient committee structure if its work is to to be accomplished expediently. I would comment briefly on committee structure and function as applied to the organization of the State Medical Society, and while some of these remarks are elementary, they are included to bring the subject into proper focus.

Committee Types

Constitutional or standing committees are those whose function, size, tenure of membership, and on occasions, geographical distribution and mode of appointment are outlined in the Constitution and bylaws. These committees have a continuing function and can be terminated only by Constitutional change.

Ad hoc or special committees are those required for a specific function. Usually initiated by action of a governing body and appointed by the president, their purpose and sometimes their structure are outlined. It is assumed that the committee will be terminated when its function has been completed and specific provision for this is rarely made. As a result ad hoc committees are often prolonged past their periods of usefulness, gather additional members each year, and gradually vegetate until their effectiveness and even original purpose may be lost. In this particular area I would make certain observations and recommendations.

Activation: When an ad hoc committee is activated, its specific purpose, size, structure, and duration should be specifically outlined, a permanent record kept in the Headquarters Office, and a copy made available to each member of the committee.

Function: The function of the committee should be clearly stated and no additional duties undertaken unless clearly specified or requested by a governing body.

Size: The number of committee members should be specified and preferably kept small and maneuverable. While of no great moment, the number is usually odd to eliminate tie votes. If additional assistance is needed in certain geographic or specialty areas, consultants may be requested and appointed although these likewise should be held to a minimum.

Membership: Members of any committee should be chosen with particular consideration of their ability and willingness to perform the required duties *and for no other reason.* Secondary consideration should be given to geographic and specialty distribution when indicated.

Rotation: If the function of the committee requires continuation for more than two or three years, a planned system of rotation should be observed. This relieves any one member from unnecessary demands on his time, prevents possible embarrassment of replacement after a laudable period of service, brings to the committee new ideas and experience, and provides a means of uncovering new ability which otherwise might never be found. Whenever any member is replaced, however, it is incumbent upon the governing body or its agent to notify him and recognize his contribution rather then discharge him without communication.

Continuation: It not infrequently happens that the duties of an ad hoc committee are extended beyond the original objectives for which they are created, either by developments within the area of their original function or by the assignment of additional related duties by a governing body. The committee may then assume a continuing function such as that encompassed by *advisory* and *liaison* com-

mittees to paramedical groups. If this be the case and it is presumed that the committee's services will be required for an indefinite period, it should then be made a *standing* committee by constitutional amendment and the function, structure, personnel, and method of appointment constitutionally specified.

The Commission System

The committees of the State Society operate under the Commission System whereby the forty-odd committees are divided into six groups, each under the supervision of a Commissioner. These are so arranged that those in each group are loosely related in function and activity. It is the duty of each Commissioner to correlate the work of the various committees in his Commission and report to the Executive Council.

The Committee Conclave

This conclave was organized some years ago as a means of coordinating all committee and commission functions with expediency and economy. Those who serve on more than one committee may conserve time, expense, and effort by combining several obligations, especially when the presence of officers or members of the headquarters staff is necessary. Ordinarily this meeting is scheduled within three or four months after the annual meeting to allow completion of all committee appointments and to permit them to outline agendas. This has been of great practical value in the past. There has been a growing tendency however, for some committees to eliminate a meeting at this time for various reasons, some of which are no doubt valid. In so doing, however, the very purpose of the conclave is being defeated. It is our sincere wish that *all committees* utilize this time if at all possible.

Commission and Committee Reports

At the termination of each year's activity, the report of each committee chairman should include an evaluation of his committee's work, suggested changes in membership, and a statement as to whether there is continued need for its function. In the same manner, the commissioner's report to the Council should evaluate the work of the committees in his commission and include recommendations for changes of personnel or termination of a committee when he feels that it has served its purpose.

Committee on Committees

This may seem like an absurdity but since committee structure needs constant supervision, I would recommend the appointment of a committee for this purpose. It should be small, but its members should include the secretary of the State Society, and officers or commissioners who are familiar with committee structure and function. Its sole function should be that of continued evaluation of committee actions, structure and objectives, and recommendations as to changes for improving their efficiency.

Summary

In summary, committees can and do perform vital and necessary functions in the Medical Society organization. If properly activated and supervised, their work can be made efficient, economical, and valuable. If carelessly managed they become top-heavy and inefficient. It is hoped that the preceding suggestions may help preserve the efficient committee structure so essential to productivity.

T. S. Raiford, M.D.

How dear do we really hold life if we begrudge the medical schools the cost of preparing the doctors to protect ourselves, our children, and their children? How dear do we hold life if we aren't prepared to set aside as much as a hundred dollars per capita a year as insurance against illness? How childish to pity ourselves for having to suffer so-called catastrophic illness when what turns illness into catastrophe is our catastrophic improvidence!—Alan Gregg in *Challenges to Contemporary Medicine,* Columbia University Press, 1956, p. 23.

Bulletin Board

Coming Meetings

North Carolina Mental Health Association, Annual Meeting—Hotel Sir Walter, Raleigh, March 11-13.

American College Health Association, Southern Section, Annual Meeting—University of North Carolina at Greensboro, March 19-20.

University of North Carolina School of Medicine, Medical Alumni Day—Chapel Hill, April 2.

North Carolina Physical Therapy Association, Annual Meeting—Winston-Salem, April 2-3.

Refresher Course in Anesthesia—Duke University Medical Center, Durham, April 8-10.

North Carolina Tuberculosis Association and North Carolina Thoracic Society, Annual Meetings—Robert E. Lee Hotel, Winston-Salem, April 22-23.

North Carolina Chapter, American College of Surgeons—Blockade Runner Hotel, Wrightsville Beach, April 23-24.

Medical Society of the State of North Carolina, Annual Session—Charlotte, May 1-5.

North Carolina Heart Association, 16th Annual Meeting—Jack Tar Hotel, Durham, May 20-21.

Tri-State Medical Association, The Carolinian Hotel—Nags Head, June 7-9.

Mountain Top Medical Assembly—Waynesville, June 17-19.

Duke Medical Postgraduate Course—Morehead City, July 12-17.

North Carolina Academy of General Practice, Fifth Charlotte Postgraduate Seminar—Charlotte, September 29-30.

Fifth District Medical Society, Annual Meeting—Mid Pines Club, Southern Pines, October 6.

New Members of the State Society

Drs. Pope Matthews Lee, Western N. C. Sanatorium, Black Mountain; Henry Remy, Pd, 14-W Doctors Bldg., Asheville; Robert Spencer Turk, S, 32 Wall St., Asheville; Wilkinson Davis Fort, ObG, the Clinic for Women, Lumberton; Wade Whitley Harrell, Oph, 1317 Florida St., High Point; Ollie Macon Smithwick, S, 602 Pasteur Dr., Greensboro; Jack Paschal McDaniel, ObG, 1256 Ft. Bragg Rd., Fayetteville.

News Notes from the Duke University Medical Center

Dr. Ewald W. Busse was designated the first J. P. Gibbons Professor of Psychiatry at Duke University Medical Center in special ceremonies Monday, January 25.

The distinguished professorship was established by the late J. B. Gibbons, Hamlet business executive, before his death in 1962. Gibbons was interested in the Duke Medical Center and in mental health problems.

A special feature of the day's program was the presentation of Mr. Gibbon's portrait to the Medical Center by the Department of Psychiatry.

The J. P. Gibbons portrait was unveiled by Dr. Busse, professor and chairman of the Department of Psychiatry at Duke. The distinguished professorship was conferred on him by President Knight.

Dr. Busse joined the Duke faculty in 1953 as chairman of the Department of Psychiatry. In 1957 he was named director of the Center for the Study of Aging.

* * *

A doctor from the Duke University Medical Center was one of the featured speakers at a program in Philadelphia marking the 300th anniversary of the beginning of American medical education.

Dr. Harbert A. Saltzman spoke on "Hyperbaric Oxygenation" at the University of Pennsylvania Medical School's Tercentennial of Medical Education celebration on January 22.

The University of Pennsylvania was the site of the first medical school in the nation.

Dr. Saltzman is directer of the Duke hyperbaric oxygenation chamber, a facility which enables doctors to saturate a patient's blood with life-sustaining oxygen by putting them under atmospheric pressure equivalent to as much as 100 feet below the ocean's surface.

The facility has been used for clinical research and treatment in a number of diseases and conditions.

* * *

Third-year Duke University medical student William W. Fox has been named winner of a scholarship that will provide funds for study outside the United States.

Designated the Davison Scholar for 1965, Fox has elected to study at Gray Memorial Hospital, Puerta Cabezas, Nicaragua in Central America.

The scholarship, established four years ago by Duke Medical School Student Government, provides a stipend of $500. It commemorates the contributions of the school's first dean, Dr. W. C. Davison, to medical education at Duke University.

In his application for the scholarship, Fox points out that, if selected, he will "especially look forward to viewing the relative balance between preventive and curative medicine" in Nicaragua.

* * *

Dr. Galen Quinn, a Duke University orthodontist who is well known for his techniques in bone grafting and his role in developing new radio-

graphic techniques in diagnosing speech problems, has been promoted from associate professor to professor of orthodontics.

The announcement was made by Duke University Provost R. Taylor Cole.

Dr. Quinn came to Duke in 1958 where he set up private practice in orthodontics with emphasis on the treatment of facial anomalies, cleft palate and related problems in cooperation with plastic and maxillofacial surgery, speech pathology and restorative dentistry. Author of a long line of dental publications, he is past editor of the Cleft Palate Journal.

* * *

A Duke University poison expert warns parents to "poison proof your home."

Dr. Jay M. Arena, director of the Duke Poison Control Center, aimed his advice primarily at parents with small children. Half of the 549 poison victims seen in 1964 were between the ages of one and three.

The warning came with year-end figures from the Center which revealed that a record number of poison cases were handled during the year.

With the number of poisoning cases handled each year by Duke's Poison Control Center on the rise, Dr. Arena expects the problem to get worse before it gets better. He observed that 40% of the population in 1970 is expected to be under 15 years of age, where more than 75% of the poisoning cases occurred.

News Notes from the Bowman Gray School of Medicine of Wake Forest College

An anatomist at the Bowman Gray School of Medicine has started a series of studies designed to provide a better basic understanding of miscarriages.

His work could help to supply the answers to questions asked by thousands of disappointed would-be parents: What caused it? Will it happen again?

Working closely with the Department of Obstetrics and Gynecology, Dr. James B. Thomas, assistant professor of anatomy, will conduct extensive pathologic and chromosomal studies on every fetus resulting from miscarriages at North Carolina Baptist Hospital.

The work will be suported for a three-year period by a $26,000 research grant, awarded recently by the National Institutes of Health.

Thomas began preliminary work on his project a year ago. Since that time he has performed histologic and pathological examinations on 86 fetuses. Recently he began what may prove to be a more profitable study of fetal chromosomes.

That a genetic factor may be involved is indicated by evidence that from 20 to 30 per cent of all miscarriages are due to or connected with a wide variety of chromosomal abnormalities.

Dr. Robert S. Pool, assistant professor of pathology at the Bowman Gray School of Medicine, has been awarded a third-year Advanced Clinical Fellowship by the American Cancer Society. The award is valued at $10,000.

A clinical fellowship, worth $3,600, was awarded to Dr. C. Douglas Maynard, assistant resident in radiology at the medical center.

* * *

Dr. Louis deS. Shaffner, associate professor of surgery at the Bowman Gray School of Medicine, has been installed as president of the Forsyth County Medical Society. He succeeded Dr. George E. Bradford, assistant professor of clinical otolaryngology.

Newly elected officers include Dr. W. Joseph May, assistant professor of clinical obstetrics and gynecology, president-elect; and Dr. Katherine Anderson, associate professor of clinical pediatrics, vice president.

* * *

Dr. Felda Hightower, associate professor of surgery, and Dr. Alanson Hinman, assistant professor of pediatric neurology, returned to the Bowman Gray School of Medicine December 18 after 10 days in the Congo.

They attended the dedication of the Christian Medical Institute of Kasai as guests of the Congolese government.

The First Presbyterian Church of Winston-Salem, of which both physicians are members, contributed $27,500 toward equipping the institute which includes schools for training nurses and technicians. The mission center is located near Luluabourg, some 400 mile sfrom Stanleyville.

* * *

Six papers, prepared at the Bowman Gray School of Medicine, were presented at the 31st annual North Carolina regional meeting of the American College of Physicians, held at Forsyth Memorial Hospital. Presenting papers were: Drs. Robert N. Headley, assistant professor of medicine; Benjamin F. Huntley, instructor in clinical medicine; William M. McKinney, instructor in neurology; Thomas F. O'Brien Jr., assistant professor of medicine; Robert R. Taylor Jr., assistant resident in neurology; and L. Earl Watts, cardiovascular fellow.

Presiding over the sessions were Dr. Charles L. Spurr, professor of medicine, and Dr. William A. Lambeth Jr., assistant professor of clinical medicine. Dr. Robert L. McMillan, professor of clinical medicine, concluded six years as governor of the state unit, American College of Physicians.

* * *

Dr. Richard L. Burt, professor of obstetrics and gynecology, spoke recently at the annual scientific assmbly of the Medical Society of Washington, D. C. His topic was "Diabetic Mechanisms in Pregnancy."

Dr. Frank C. Greiss Jr., assistant professor of obstetrics and gynecology, served as a member of the guest faculty for a postgraduate course at the 18th annual meeting of the American Medical Association in Miami Beach, Florida. He lectured on "Surgical Complications of Labor and Delivery."

He also participated in a Reproductive Research Symposium at the University of Washington, Seattle, Washington, where he presented a paper on "Effect of Labor on Uterine Blood Flow during Ovine Pregnancy."

* * *

Dr. Margaret C. Conrad, instructor in physiology, was recently named to membership on the Medical Advisory Board of the American Heart Association's Council on Circulation.

* * *

Dr. John A. Gergen, assistant professor of physiology, has been certified by the Board of Qualification, American Electoencephalographic Society.

* * *

Dr. Donald M. Hayes, assistant professor of medicine, was recently elected a fellow of the American College of Physicians.

* * *

Dr. Quentin N. Myrvik, professor and chairman of the Department of Microbiology, has been elected a diplomate of the American Board of Microbiology and certified in the area of public health and medical laboratory immunology.

* * *

Three members of the Bowman Gray faculty have been elected fellows of the American Academy of Pediatrics. They are Dr. Edwyn T. Bowen Jr., instructor in clinical pediatrics; Dr. James A. Chappell, instructor in clinical pediatrics; and Dr. Robert C. McKone, assistant professor of pediatrics.

Thirty-one obstetricians and gynecologists from New Jersey spent two days at the Bowman Gray School of Medicine recently as guests of the Department of Obstetrics and Gynecology.

The doctors, members of the New Jersey Gynecological and Obstetrical Club, observed clinical and research facilities and techniques at the medical center and attended a symposium.

News Notes from the University of North Carolina School of Medicine

Miss Sarah Virginia Dunlap, assistant to the dean and secretary to the faculty of the University of North Carolina School of Medicine, has accepted an appointment as associate secretary of the John and Mary R. Markle Foundation in New York City.

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Artie L. Sturgeon, Ph.D.

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Charleston Mental Health Center
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Malcolm G. MacAulay, M.D.
Phone: 344-3578

Mental Health Clinic
Professional Building, Wise, Va.
Pierce D. Nelson, M.D.
Phone: 328-2211

She left Chapel Hill on January 1 and has assumed her new duties.

Miss Dunlap, a graduate of the University of North Carolina at Greensboro, became secretary in the dean's office at the medical school here in 1942 and assumed the additional duties of secretary to the medical faculty about eight years ago. An "honorary alumnus" of the Medical School, she has served as secretary of the Medical Alumni Association for several years.

* * *

Hemophilias and some of the problems encountered in treating patients with these bleeding disorders are described in a new book edited by Dr. Kenneth M. Brinkhous, professor and head of the Department of Pathology.

"The Hemophilias," a 412-page book representing the proceedings of an International Conference of Hemophilia in Washington, D. C., last year, has just been published by the U.N.C. Press.

The book contains more than 45 scientific papers dealing with recent advances and hoped-for developments in the treatment of "bleeders."

* * *

A federal grant of $16,000 will continue for another year a research study here aimed ultimately at bringing relief for a common affliction of women—pain and swelling of the breasts during the premenstrual period.

The National Institute of Child Health and Human Development has awarded additional funds for the second year of a three-year, $50,000 project to Dr. Robert Zeppa, a surgeon at the University of North Carolina School of Medicine.

* * *

The right to die, the right to control births: medicine and ministers, and psychiatry and religion is being studied by medical students at the University of North Carolina in a special elective course offered this year for the first time.

Chaplain Fred W. Reid, Jr., of N. C. Memorial Hospital here said the six-hour course will acquaint medical students with the ways in which medicine and religion work together.

Arne E. Larson of Chicago, assistant director of the American Medical Association's Department of Medicine and Religion, formally introduced the course at the combined medical staff conference at the hospital on January 6.

A series of five evening sessions is scheduled each week after the staff conference. Each session features a medical expert introducing a topic to be discussed by a three-member panel of ministers. Chaplain Reid is moderator for each session.

* * *

A $25,000 grant will make it possible to continue a research study here which is finding out some new things about why the heart beat speeds up or slows down under different conditions.

The National Institute of Mental Health has added funds for the second year of a two-year, $54,000 grant to Dr. Paul A. Obrist, psychologist at the UNC Psychiatric Center.

The ultimate goal of the research is to find out whether heart rate changes detected in the laboratory are caused by emotions or if they serve another function.

* * *

The major responsibility of the medical profession in North Carolina's effort to break the poverty cycle is "to become involved in planning programs at the community level, to determine what needs of a medical nature exist, and how these needs can be met."

The message was delivered to a combined staff conference at the School of Medicine by George H. Esser, Jr., executive director of the North Carolina Fund in Durham.

He extended to the medical profession an invitation to use the area for a medical care program. The N. C. Fund now has an experimental program in 11 communities.

Research into a suspected cause of premature births will be continued at the University of North Carolina School of Medicine with an additional $18,000 grant from the National Institute of Child Health and Human Development.

The principal investigator is Dr. Janet J. Fischer of the UNC Department of Microbiology.

The federal funds will make it possible to continue a long-range study of the importance of bacteriuria in pregnancy. Dr. Fischer said bacteriuria may be a cause of prematurity. She is studying effects of the infection on pregnant mothers and their unborn babies.

* * *

A Virginia psychiatrist spoke at the UNC Psychiatric Center on December 18 about "The Private Practice of Comprehensive Psychiatry."

Dr. Julian W. Selig, Jr., a native of Elizabeth City is a graduate of the UNC School of Medicine (1959) and completed a three-year residency in psychiatry here in July, 1963. He began the private practice of psychiatry in Norfolk, Virginia, in 1963.

North Carolina Board of Medical Examiners

The North Carolina Board of Medical Examiners has announced the following schedule of meetings for May, June, and July:

Hotel Queen Charlotte, Charlotte, Monday, May 3, 9:00 a.m.—Applicants for license by endorsement to be interviewed.

Sir Walter Hotel, Raleigh, June 14-17—Written examinations for licensure. Tuesday, June 15, 9:00 a.m.—Applicants for license by endorsement to be interviewed.

Mayview Manor, Blowing Rock, Friday, July 23, 9:00 a.m.—Applicants for license by endorsement to be interviewed.

North Carolina Heart Association

The North Carolina Heart Association has announced courses on closed chest cardiac resuscitation to be held throughout the state. The comprehensive instruction on the death-reversal technique, which will be coordinated by Dr. Ralph Gorten of Veterans Administration Hospital, Durham, is designed for family physicians and specialists in cardiology and internal medicine throughout the state, according to Dr. Gorten.

An initial course for instructors will be held at Duke University Medical Center early in April, to be followed by similar courses in various parts of North Carolina during the following months. Plans include workshops for physicians, followed by later ones for allied health personnel and selected lay groups.

The relatively new technique, used to revive victims of sudden death, involves manually-applied pressure on the chest in conjunction with mouth-to-mouth or mouth-to-nose "expired air" respiration. Sudden death, or heart-lung arrest, is usually caused by heart attack, electric shock, suffocation, drowning, or drug reaction. The emergency procedure must be applied within four to six minutes after clinical death before irreversible cell damage occurs in the brain.

A recent survey by the North Carolina Heart News Bureau in Chapel Hill revealed that timely application of the technique had brought back to life some 100 North Carolinians who had died, that is, whose hearts had stopped beating and who had ceased to breathe.

* * *

Miss Sylvia Wiseman of Salisbury has been named North Carolina representative to the National Heart Committee of the Broadcasting Industry, to succeed Gaines F. Kelley of Greensboro. The announcement was made by Roger W. Clipp, of Philadelphia, chairman of the local station division of the national committee.

Miss Wiseman, of Radio Station WSTP in Salisbury, served during the past year as a consultant to the North Carolina Heart Association on radio public service programming.

Forsyth County Mental Health Association

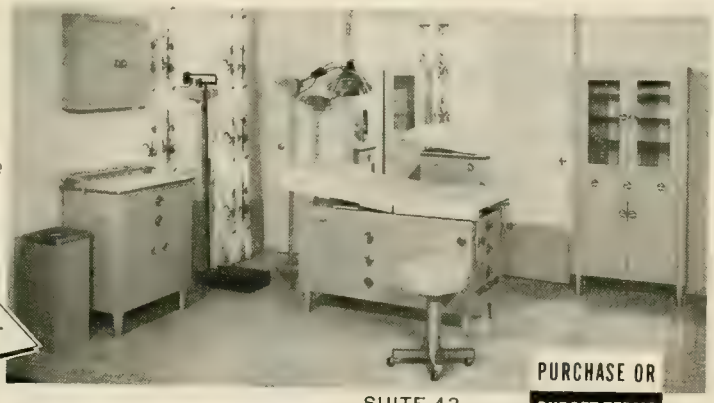
A psychiatrist and a clergyman in Winston-Salem are exchanging their "Viewpoints on Living" in a weekly radio program broadcast over station WSJS in Winston-Salem.

They are Dr. Joseph J. Cutri, assistant professor of psychiatry at Bowman Gray School of Medicine of Wake Forest College, and the Rev. Orion N. Hutchinson, pastor of Love's Methodist Church in Walkertown.



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The program, heard from 10 to 11 p.m. Mondays, is conducted informally, dealing with topics based on suggestions and questions received during the program by telephone calls or through letters received during the week.

Among subjects recently considered from both the medical and religious viewpoints have been alcoholism, depression, sex education in schools, the use of drugs in the treatment of mental illness, and homosexuality.

Dr. Cutri is consultant to the Forsyth County Mental Health Center and a member of the State Society's Mental Health Committee. The Rev. Mr. Hutchinson, immediate past president of the North Carolina Mental Health Association, is a consultant member of the State Society's Committee on Medicine and Religion. Both men are on the Board of Directors of the Forsyth County Mental Health Association.

Edgecombe-Nash Medical Society

Dr. Arthur Christakos, assistant professor of obstetrics and gynecology at Duke University School of Medicine, spoke at the January meeting of the Edgecombe-Nash Medical Society. His subject was "What Constitutes an Adequate Infertility Investigation."

American College of Gastroenterology

The Southern Regional Meeting of the American College of Gastroenterology will be held in New Orleans, La., on Sunday, 7 March 1965. The sessions will take place at the Roosevelt Hotel and will commerce at 2:00 P.M.

Members of the medical profession are cordially invited to attend. A copy of the program may be obtained from the Secretary, American College of Gastroenterology, 33 West 60th Street, New York, N. Y. 10023.

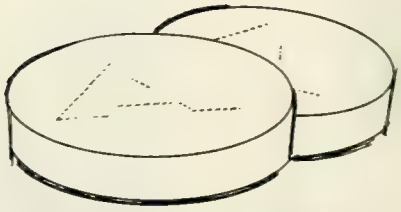
American College of Surgeons

Approximately 1,125 surgeons were inducted as new fellows of the American College of Surgeons in cap-and-gown ceremonies during the annual Clinical Congress of the college held in Chicago recently.

Those receiving this distinction from the State of North Carolina are as follows:

From Asheville—William J. Callison and Robert P. Crouch; Boone—Henry C. McGown, III; Camp LeJeune—Robert R. Roberts, USN; Charlotte—William T. Berkely and Francis Robicsek; Durham—Delford L. Stickel; Goldsboro—James M. Lancaster; Hendersonville—Samuel C. Falvo; High Point—John L. Brockmann, Kay Williams; Lumberton—Jack E. Mohr.

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American Board of Obstetrics and Gynecology

The Part II (oral and clinical examination) for all scheduled candidates will be conducted by the entire Board at The Edgewater Beach Hotel, Chicago, Illinois, April 26-May 1, 1965.

New and reopened applications and requests for re-examination in the Part II examination for 1966 will be accepted in the office of the Secretary during April and May, 1965. Applications and requests postmarked later than May 31st will be returned to the sender. *Candidates are reminded that duplicate lists of patients dismissed from their service during the twelve months immediately preceding April 1, 1965, must accompany application or request to take the Part II examination.*

Current bulletins outlining present requirements, and application forms may be obtained by writing to the Office of the Secretary, Clyde L. Randall, M.D., Secretary and Treasurer, American Board of Obstetrics and Gynecology, 100 Meadow Road, Buffalo, New York 14216.

Applicants are urged to familiarize themselves with the current rules and regulations, particularly in view of the various changes taking place beginning this year.

Department of Health, Education, and Welfare

The Mental Retardation Branch, Division of Chronic Diseases, is one of the newest programs in the Public Health Service, and the only one whose work consists exclusively of providing assistance in the overall development of services for the mentally retarded. The shortage of professional personnel is acute, and provision for professional training has high priority in this program.

The Senior Clinical Traineeship Program is designed to provide opportunities for qualified physicians to obtain additional training in the field of mental retardation, with major emphasis on the clinical management of mentally retarded patients, and also experience and training in associated areas, e.g., neurology, psychology, psychiatry, audiology and speech pathology, and genetics. **Support for basic residency training is not available under this program.**

Stipends are available of $6,000-$10,000 per year plus a $500 allowance for each dependent.

Those interested in applying for such a traineeship may obtain further information and application forms by writing to: Senior Clinical Traineeships, Mental Retardation Branch, Division of Chronic Diseases, U.S. Public Health Service, Washington, D. C. 20201.

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Southern Electroencephalography Society

The Southern Electroencephalography Society is organizing a chartered flight to Vienna, Austria, where the VIII International Congress of Neurology and the VI International Congress of Electroencephalography and Clinical Neurophysiology are to be held September 5-10, 1965. The flight will originate in Atlanta, Georgia, September 4, and will return approximately 20 days later from London, England, to Atlanta.

Several extra seats are available for members of other societies who plan to attend the meetings.

Information may be obtained by writing H. Lemmi, M.D., University of Tennessee, Box 376, Memphis, Tennessee, 38103.

AMA issues Family Health Guide

The American Medical Association is preparing for publication "Today's Health Guide," a manual of health information and guidance for the American family.

The 640-page book, in two colors throughout, will include 70 chapters, each dealing with an important aspect of health in the family. It will be illustrated by hundreds of easy-to-understand drawings, including "trans-vision," or full-color "see through" drawings, of the organs and systems of the human body.

The AMA does not expect to make a profit on the book, and will distribute it in the interest of better health, the spokesman said. None of those participating in the writing and preparation will be compensated in any way. Regular price will be $5.95, with an introductory offer of $4.95. The manual will be distributed from the AMA headquarters, 535 N. Dearborn St., Chicago, by mail order.

Women Physicians Needed for Peace Corps

Women physicians (specialists and general practitioners)—as well as professionally-trained personnel in all other medical and paramedical categories—are in constant demand as Peace Corps Volunteers in many African, Asian and Latin American countries.

Detailed information about specific programs and Volunteer Questionnaries may be obtained from Office of Public Affairs, Peace Corps, Washington, D. C. 20525.

Promotion Help Offered for Diabetes Detection Programs

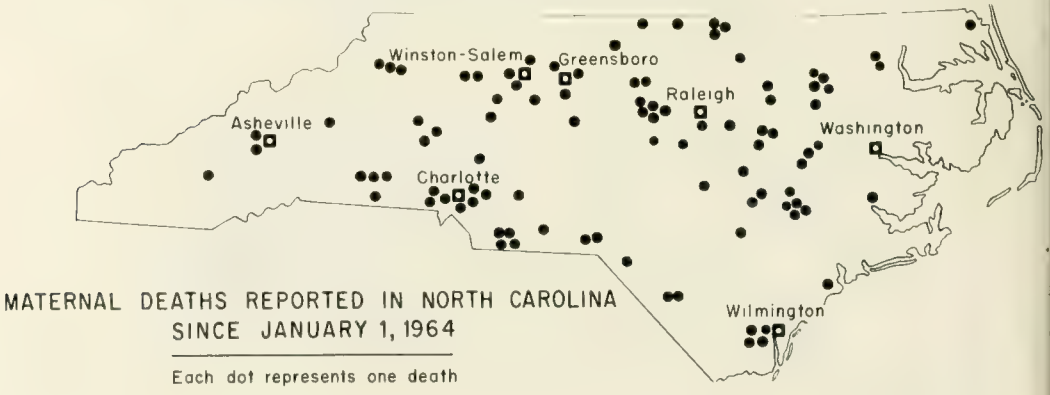
A wide variety of new informational and promotional materials is available to medical societies and physicians who need help in publicizing existing diabetes detection drives or in organizing new ones in their communities.

Details of the assistance program are described in a pamphlet, "An Effective Program of Year-Round Diabetes Detection in Your Community," available on request.

These special promotional materials are provided as a public service by The Upjohn Company. A unique feature of the material is that the separate elements can be adapted to include the name of the local medical and other community groups sponsoring the program.

A key element is a dramatic diabetes detection film in 5-minute and 1-minute versions suitable for showing in movie houses, on TV, and at club meetings. The name of the medical society or other local sponsoring group may be inserted at the end of the film.

City and county medical societies, local diabetes detection committees, and other interested groups may have sample copies of the descriptive brochure and other promotional literature on request. Write to: Diabetes Detection, 342 Madison Avenue, Room 914, New York, N. Y. 10017.



MATERNAL DEATHS REPORTED IN NORTH CAROLINA SINCE JANUARY 1, 1964

Each dot represents one death

The Month in Washington

The Food and Drug Administration has started enforcing the prescription drug advertising provisions of the new law.

Sales of ethical drugs are now exceeding $2 billion a year in the United States. The Bureau of the Census reported ethical drug sales at $2.05 billion in 1963, the first year that they had gone over the $2 billion mark. The Pharmaceutical Manufacturers Association's figure was $2.39 billion.

The law requires that prescription drug advertisements show:

—the "established name" of the drug, if one exists, in type at least half as large as that used for the brand name;

—The drug's quantitative formula, and

—A true and non-misleading brief summary of information about adverse side effects, contraindications, and effectiveness of the drug for the guidance of physicians.

In enforcing these requirements, FDA said it would seek to determine whether a fair balance exists between the information on effectiveness and that on side effects and contraindications.

The FDA's Bureau of Medicine has started monitoring professional journal advertising for prescription drugs. It will forward violate advertisements with appropriate recommendations to the FDA Bureau of Regulatory Compliance.

Violations of prescription drug advertising will be evaluated in two categories:

—Positive claims or omissions concerning the product which present potential danger to the patient in varying degrees. Examples include omission of some of the pertinent side effects, precautions or contraindications; improper statements about the effectiveness of, or indications for, the drug or antibiotic; omission of some of the information on various dosage forms, ingredients, or directions for use where required.

—Claims which may or may not involve danger to patient health but which, in the selling message, can seriously mislead as to the proper place of the drug or antibiotic in the total spectrum of products available to meet a specific disease situation.

The American Medical Association and the Food and Drug Administration have warned that two fever and pain-relieving drugs are causing fatal agranulocytosis, a blood disorder, in some patients.

The drugs are aminopyrine and dipyrone, closely related compounds which have been dispensed widely by prescription for many years. Drastic label changes restricting the recommended uses for the drugs were announced by FDA. An editorial supporting the FDA action was carried in the AMA's journal, *JAMA*.

The FDA ruling was based on case reports collected by AMA and on recommendations of a special committee of medical experts in the fields of hematology, internal medicine, neurology, pediatrics and pharmacology.

* * *

Nearly one million more people were admitted to hospitals in the U.S. in 1963 than in the previous year, according to the Health Insurance Institute.

The American Hospital Associations, which includes terminal hospitalizations in its survey, found the average hospital stay for all ages to be 7.7 days. A study conducted by the U.S. National Health Survey, which included federal hospitals, and was based on representative household interviews, put the average hospital stay at 9.4 days. It did not include terminal hospital stays.

The NHS report showed that persons with health insurance protection averaged shorter hospitals stays than those with no insurance protection at all. This may indicate, the report suggested, that persons with health insurance protection will seek hospital care more often for diagnosis or for less serious illness than the uninsured.

The number of persons protected by hospital expense insurance provided by insurance companies, Blue Cross, Blue Shield and other health care plans, rose to 145,329,000 by the end of 1963, the Institute said.

Benefits paid by these organizations toward the costs of hospital care totaled $4,544,000,000, or an average of $12.5 million a day. Total health insurance benefits amounted to $7.8 billion.

A Presidential Study Commission has recommended a $2.9 billion program on heart disease, cancer and stroke.

The research and treatment plan would be built around a network of regional centers designed to learn more about these diseases which cause 70 per cent of American deaths.

The study group was set up by President Johnson in March and commissioned to draw up a blueprint for improving national facilities for fighting these diseases. At present the government is spending about $220 million in the research and treatment areas covered by the report.

Classified Advertisments

Wanted immediately locum tenens to cover large general practice until July 1, 1965. Guarantee minimum $1,000.00 per month with much more possible. Permanent location may result if desired. N. C. License required. Communicate Director, Midway Clinic, Canton, N. C.

Wanted July 1, 1965 G. P. or Internist to assume large clinic practice. Doctor leaving to specialize. Excellent Opportunity with guarantee of $1,000.00 minimum from start, much more possible. Communicate Director, Midway Clinic, Canton, N. C.

Physician Wanted: Physician interested in general practice; excellent opportunity. Piedmont section. Reply in care of the Journal. 84-122-6.

For Sale: Fischer 75 MA X-ray-Fluoroscopy Unit and all accessories. Fischer Diathermy Burdick EK2 Electrocardiograph. C. T. Harris, Jr., M.D., 425 Roberts Street, Salisbury, N. C.

Needed — general physician — family internship by four-man group in growing rural program in West Virginia. Modern clinic facilities, regular visiting specialist consultant staff, scheduled training and vacation periods, foundation sponsorship, no investment required. Starting net income range $14,000 through $18,000 depending on qualifications. Reply in care of the Journal, P. O. Box 790, Raleigh, N. C.

In Memoriam

Norman La Rue Anderson
1914-1964

The Buncombe County Medical Society lost a respected and valuable member on May 25, 1964 in the death of Norman LaRue Anderson.

Dr. Anderson was born in Chicago, Illinois, in 1914. He was the son of Andrew R. Anderson and Phoebe Van Hook Anderson. His father was professor of Latin and Greek at Duke University. His mother, who survives, lives in California.

Dr. Anderson attended Duke University, receiving his M.D. degree in 1939. He interned at the Billings Hospital of the University of Chicago in 1940. Following this he was assistant resident physician at Duke University in endocrinology and pathology. He developed a tuberculous adenitis which may well have influenced his choice for later study. He joined the staff of the Tuberculosis Sanatorium in Alto, Georgia, serving there until 1944 when he came to the W.N.C. Sanatorium at Black Mountain where he worked until 1946.

In 1946 Dr. Anderson entered the private practice of medicine in Asheville. He rapidly established himself as an outstanding physician in diseases of the chest and internal medicine. He published a number of original communications in leading medical journals; the first written in collaboration with Dr. Walter L. Palmer, was entitled "The Danger of Gold Salt Therapy." He was an early advocate of pneumoperitoneum in the treatment of tuberculosis and published articles dealing with this form of treatment in "The American Review of Tuberculosis" and in Diseases of the Chest."

Dr. Anderson, known as "Andy" to his many friends in the profession, was an ardent sportsman. It is little known that he played cello in the Salt Lake Symphony Orchestra before he was 13 years of age. He sang bass in a quartet of the Duke University Chapel choir. He was perhaps best known to his friends as a real competitor in the fields of golfing, hunting, and fishing. He published work in the Bulletin of the Carolina Bird Club in 1959. He was considered an authority in the fields of ornithology, woods, archery, and mushrooms.

Dr. Anderson belong to many medical societies. He was a fellow of both the American College of Physicians and the American College of Chest Physicians, and at the time of his death was president of the North Carolina Thoracic Society. He was a member of the Presbyterian church in Asheville.

He is survived by his wife, the former Miss Margaret Zipphies of Savannah, Georgia, and three children: Margaret, Virginia, and Elizabeth.

Andy will be remembered by his friends for

the many things he added to the zest and enjoyment of his every endeavor in life.

It is respectfully requested that these words be entered into the minutes of the Buncombe County Medical Society, and that copies be sent to his family, to the North Carolina State Medical Society, and to the American Medical Association.

J. S. Raper, M.D.
Buncombe County Medical Society

Robert Donald Higgins, M.D., M.P.H.

A native of Ironton, Ohio, Robert Donald Higgins reecived his undergraduate education in the Crabbe School in Ashland, Kentucky, and at the University of Kentucky. He received his medical degree from the University of Louisville and his master of public health degree from Harvard University.

He served with distinction as Assistant Surgeon in World War I.

For 43 years he had been active in public health, serving in several important administrative capacities in Kentucky, Florida, and North Carolina. His first service was with the State of Kentucky as director of the Boyd County Health Unit, and later he served as director of the Volusia County Health Unit in Florida.

On February 1, 1957, he joined the staff of the North Carolina State Board of Health as Assistant Director of the Local Health Division. Since February 1, 1958, he served as Division director.

As an able administrator, valued friend, a master organist and pianist, and joyous comrade, he will live in the hearts of those who knew him —especially those friends in North Carolina, and in the Southern Branch and national fellowships of the American Public Health Association.

WHEREAS, The sudden and untimely death of Dr. Robert Donald Higgins, director of the Local Health Division, has brought profound sorrow to his many friends and associates; and

WHEREAS, The State Board of Health, wishing to give recognition to its sense of loss in his passing and its grateful appreciation of his great spirit and many virtues, does hereby set forth this formal resolution of respect; therefore, be it

Resolved, That this expression of respect and appreciation be enacted by the State Board of Health, and spread on its official minutes, and that a copy be forwarded to the family of our departed friend to convey, even though inadequately, the sincere sympathy of the members of the State Board; and be it further

Resolved, That copies be also sent to the Editor, the North Carolina Medical Journal; the Editor, the *Journal of the American Medical Association;* the Editor, the *Journal of the American Public Health Association;* the Editor, *Newsletter* of the American College of Preventive Medicine; the Secretary, the Medical Society of the State of North Carolina; the Secretary, the North Carolina Public Health Association; and the Director the Department of Archives and History.
December 3, 1964

A resolution of appreciation was likewise received from the North Carolina Academy of General Practice.

F. W. Moody White, M.D.

Life ebbed away from a dedicated physician and a beloved citizen when Dr. F. W. M. White died on October 5, 1964, after a valiant fight against the overwhelming odds of a massive stroke.

He worked and lived so completely for his patients and friends in his home community of Halifax that his death seems like a bad dream. Actually, his warm presence still can be felt, and no doubt there will always be a Moody White, as he was known to his colleagues and closest friends.

After being given the honor of writing his eulogy, I was walking down the main street of Halifax within sight of his office when I distinctly heard Moody say, "Bob Young, don't you write about me in the cold third person as is customary, but please recall my life in the warm first person, as though we were having one of our friendly chats."

And thus one of the deepest and warmest friendships I've ever experienced developed over a quarter of a century while Moody and I lived and worked together, and during our friendly chats in Halifax. He was always willing and happy to lend an ear to patients and friends as they poured out their problems and heartaches to him.

I used to fuss at him about sticking to his work so closely without getting some relaxation and recreation, but he would always answer, "Bob, I'm happiest while I'm practicing medicine." He rarely left his work for longer than a day, except when he visited his home in the mountains of North Carolina.

Moody White was born on October 10, 1898, at Windsor, the son of James H. and Rosa Medlin White. He attended a private school at Windsor, built by his father, and also Drivers Military School at Drivers, Virginia.

He was in military service during World War I.

He was a graduate of Wake Forest College (1921), where he was a member of Phi Chi (medical) and Kappa Alpha fraternities. After receiving his degree in medicine from the Medical College of Virginia (1924), he served an internship at the Stuart Circle Hospital in Richmond. During many of our chats Moody spoke warmly of his experiences while a student at Wake Forest and at the Medical College of Virginia, particularly the latter.

For years before his death, Moody was senior warden of St. Mark's Episcopal Church at Halifax. He also served his church well in many other capacities.

He was an outstanding Mason, serving as Past Master of Royal White Hart Lodge No. 2 and receiving an achievement medal for his unusual accomplishments in Masonry. He was also a Shriner. I had the privilege of being associated with him in Masonry and again can attest to his devotion in this activity. As a Mason, he was always interested in the welfare of the Oxford Orphanage and was a constant benefactor. He wouldn't like for me to speak of his generosity.

I would have to say again that Moody's main hobby was his work, but he had a special interest in cultivating roses. He and Mary Ellen worked together in growing beautiful roses which could be seen in a glorious range of colors around his office.

His survivors are his widow, Mary Ellen White; his daughter, Anne Harper; two grandchildren, Mary Moody and James Harper; and four sisters: Mrs. Alethea Cobb and Mrs. Ernest Tayloe of Windsor, Mrs. S. A. Duncan of Benson, and Mrs. Rubye Arnold of Coats.

One feels utterly helpless in trying to pay tribute to a departed friend and colleague when his life has been as full and fruitful as Moody White's. This cannot be done adequately with a few words.

I only hope, Moody, that you are pleased with my sincere efforts. We shall always miss you, but I am quite sure that we will continue to feel your warm presence and hear your kind words as we make our daily rounds in Halifax, your beloved earthly home.

ROBERT F. YOUNG, M.D.

December 9, 1964

Murray Carlyle Kinlaw, M.D.

Resolved: That the Robeson County Medical Society, Robeson County, North Carolina, with deepest regret and most profound sorrow records the death of Dr. Murray Carlyle Kinlaw which occurred August 13, 1964.

He conducted himself in such a manner that those who knew him—doctors, patients, and friends—held him in the highest esteem. He was a Christian gentleman, a dedicated physician, a devoted husband, and a provident father.

His contributions to the medical profession, other than his ability as an obstetrician, included: president of the Robeson County Medical Society in 1945-46; secretary of the Medical Staff of Robeson County Memorial Hospital in 1952-55; Chief of Staff of Robeson County Memorial Hospital in 1956-57.

Dr. Kinlaw, the oldest son of James Elmer and Cora Brady Kinlaw, was born in Bladen County, North Carolina, on June 15, 1911.

His formal education was obtained first from elementary and high schools in Elizabethtown, North Carolina, after which he entered Wake Forest College where he obtained his premedical education and first two years of medicine.

He then transferred to Temple School of Medicine where he graduated in 1935. After serving his internship at James Walker Hospital in Wilmington, North Carolina, he was associated with Dr. E. C. Bennett of Elizabethtown, North Carolina, in 1936.

Dr. Kinlaw opened his office in Pembroke, North Carolina, in 1937, remaining there until 1948, thence moving to Lumberton, where he practiced from 1948 until his death in 1964.

Dr. Kinlaw was married to Ida Pearl (Jackie) Worsley. There were two children of this marriage: Murray Carlyle, Jr., and Daryl Stephen.

We lost one of our most beloved members. His death seems all the more tragic at this time when his experience and knowledge were at their peak. His unselfish service and universal consideration shall be cherished in our memory.

Be it further Resolved that the Resolution be recorded in the minutes of the Robeson County Medical Society.

N. O. Benson, M.D.
Horace M. Baker, Jr., M.D.
For the committee

John Samuel Slate, M.D.

WHEREAS, Dr. John Samuel Slate was called from us by death on December 1, 1964; and

WHEREAS, Doctor John Samuel Slate was a loyal and faithful member of the Forsyth County Medical Society for 60 years, during which he was devoted in his practice of medicine and gave untiringly and wholeheartedly of his medical skill to the people of this community;

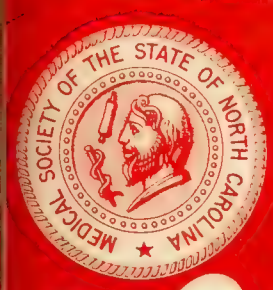
Resolved, That on behalf of the entire membership of the Forsyth County Medical Society, the Bereavement Committee adopts these resolutions in tribute to the memory of our late fellow member and colleague. And be it further

Resolved, that a copy of these resolutions be spread upon the minutes of the Forsyth County Medical Society, and a copy sent to the bereaved family.

As more than one wise doctor has realized, the so-called rare diseases are a little commoner than they are reported to be, and the reports of the common diseases contain and hide rarer diseases.—Alan Gregg in *Challenges to Contemporary Medicine,* New York, Columbia University Press, 1956, p. 8.

NORTH CAROLINA

March, 1965
Vol. 26 No. 3



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IN THIS ISSUE:

Sparganosis – First North Carolina Cases

Program of the One Hundred Eleventh Annual Session

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WHEN ADVICE IS NEEDED . . .



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VOLUME 26 MARCH, 1965 NUMBER 3

Sparganosis in North Carolina

Report of Two Cases

JOSEPH B. DUDLEY, M.D.

AND

ROBERT S. POOL, M.D.

WINSTON-SALEM

Parasitic worms, structurally suggestive of Sparganum, were recently found in the dermis and subcutaneous tissue in two cases seen in our laboratories. Human infection with this helminth has been recorded in the three bordering states of Virginia, Tennessee, and Georgia but never in North Carolina.

Case Reports

Case 1

An 83-year-old white woman from eastern North Carolina, who was in good health and had never traveled out of the region, had a solitary cutaneous nodule excised from the leg. We received an elliptical piece of skin, 2.4 x 0.7 x 0.5 cm, with a slight central elevation. The cut surface was light gray to yellow. Microscopically, helminthic larvae up to 480 microns in diameter were found in the dermis, associated with foci of necrosis and fibrosis and a slight chronic inflammatory response (Fig. 1). The larval cuticle was about 10 microns thick, and the internal structure of the worm included scattered clear spheres approximately 12 microns across and fibrillar eosinophilic bundles apparently representing muscle (Fig. 2). In the year following excision no additional nodules had developed.

Case 2

This 48-year-old white woman, also from eastern North Carolina, noted a firm mass in the neck for several weeks. About one month before, she had fractured her ankle in a fall from a pecan tree. Except for a chronic cough and history of heavy cigarette smoking she was in good health. She had many dogs and cats as domestic pets.

A chest film revealed two masses in the right lung. One, involving the right lower lobe, was well circumscribed, distinct, and about the size of a silver dollar. The other, located in the right upper lobe, was indistinct. Because the nodules were suspected of being metastatic lesions, the stomach and duodenum, colon, and kidneys were examined radiographically; they were normal. A firm 1.5 cm mass was also noted in the subcutaneous tissue of the forearm.

The cervical and forearm lesions were excised. The cervical mass was fixed to the sternocleidomastoid muscle, which was incised along with a portion of the jugular vein in removing the mass. No other cervical nodules were found at operation.

The mass from the neck was 3.5 cm in diameter, firm, gray, and partially bounded by tan nodular tissue (Fig. 3). Microscopically, the peripheral tissue contained normal lymph nodes, and the bulk of the specimen consisted of brightly eosinophilic, necrotic, and focally calcified fibroadipose tissue. Chronic inflammation, including foreign-body type giant cells, was present in the periphery of the necrotic area. In many sections, as many as four portions of a worm were present. It could not be determined whether these represented multiple portions of one worm or several worms. The segments varied from 180 to 500 microns in maximum dimension and had a hyaline cuticle 8 to 12 microns thick (Fig. 4). No distinct internal structure was discernible.

The mass from the forearm was a cutaneous hemangioma without evidence of parasitic infection.

Several weeks later a thoracotomy at another hospital revealed parasitic structures in the right upper and lower pulmonary lobes. They were identical to those present in the neck.

For editorial comment see page 123

Discussion

Thirty-five cases of human sparganosis have been reported in the United States since Stiles' first case in 1908[1]. Twenty-five

From the Department of Pathology, Bowman Gray School of Medicine of Wake Forest College, Winston-Salem, N. C.

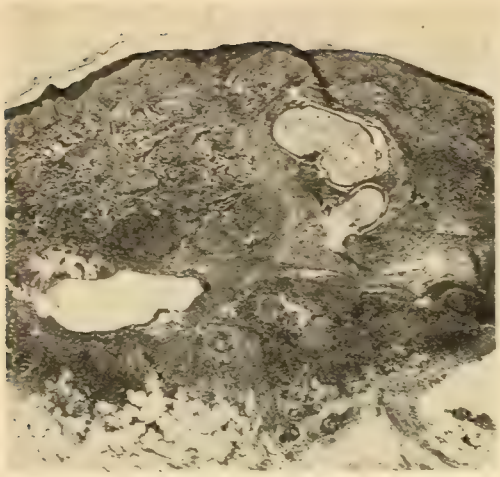


Fig. 1. (Case 1) Larvae in dermis. (Hematoxylin and eosin stain X 14)



Fig. 2. (Case 1) Higher magnification showing cuticle and internal structure of larva and surrounding necrosis. (Hematoxylin and eosin stain X 90)



Fig. 3 (Case 2) Cut surface of subcutaneous nodule removed from neck.

of these were found in Louisiana, and most southern states except North Carolina and South Carolina have yielded at least one case report[2]. It is interesting that one of this country's first demonstrations of the adult helminth in wild animals was in a North Carolina bobcat (*Lynx rufus*). The captured animal was taken to the National Zoological Gardens in Washington, D. C. and died several days later. An autopsy revealed the adult worm in the bobcat's intestinal tract[3].

The generic term *Sparganum* has been used in those instances where the infecting larvae are found but the adult worm is not identified. The life cycle of the worm which causes sparganosis in humans in this country is not fully known; most cases are presumed to represent infection by the larval stage of a tapeworm, *Diphyllobothrium* (*Spirometra*) *mansonoides*[4]. The adult form is about 4 feet long and lives in the intestinal tract of a variety of animals including domestic cats and dogs, and bobcats. Ova, passed in the feces of these animals, develop in water into a free-swimming ciliated embryo, which is ingested by a minute crustacean (*Cyclops*). In the body cavity of the crustacean the embryo develops into a procercoid larva. In the natural cycle the *Cyclops* containing these larvae is ingested by a second intermediate host such as a snake, frog, or field mouse; the larva then migrates into muscular tissue of the host, where it develops into a larger, plerocercoid larva. By eating the flesh of the second intermediate host the cat or dog becomes infected with the plerocercoid larva, which in two or three weeks matures into the adult worm, thus completing the cycle[5, 6].

Man may be infected in at least two ways —by drinking water containing the larva-bearing crustaceans, and by cutaneous contact with fresh larva-containing tissues of a second intermediate host. This latter method is an important means of human infec-

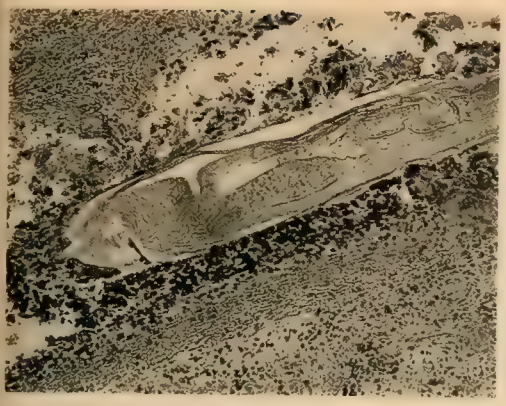


Fig. 4. (Case 2) Larva in subcutaneous tissue with surrounding necrosis. (Hematoxylin and eosin stain X 80)

tion in Asia where poultices of frog meat are commonly used.

There is little discussion in the literature of therapy other than excision of the lesion; this is usually feasible since the disease most often presents as a solitary lesion.

A definitive diagnosis can be made only by infecting a laboratory animal with the sparganum larvae and identifying the adult tapeworm which develops[7]. In most cases, as in our two, the larvae are dead upon receipt of the specimen, and a presumptive diagnosis is made on the basis of their structure. The microscopic descriptions in the literature are scanty but generally correspond to those which we noted in Case 1. The organism in Case 2 was degenerated to the point that internal structure was poorly defined, but the dimensions are suggestive of the larva of *D. mansonoides* and not of other common human-infecting larvae such as *Necator americanus, Ancylostoma braziliense, Toxocara canis, Toxocara cati, Strongyloides stercoralis,* and *Ascaris lumbricoides*. The adult pinworm (*Enterobius vermicularis*) may be of a shape and size comparable to the worm in our Case 2, but no lateral spine characteristic of that worm is present in the multiple sections of our material.

We interpret both of these cases as sparganosis on the basis of the microscopic findings, and to our knowledge these are the first human cases reported in North Carolina.

Summary

Two women living in eastern North Carolina had superficial worms which provoked nodules requiring surgical excision. One of them also had worm-containing nodules in her lungs. These cases of sparganosis are thought to be the first recorded in North Carolina.

Acknowledgement

The authors gratefully acknowledge the help of C. D. Edwards, M.D. and F. G. Jarman, Jr., M.D. in supplying the clinical information in these cases.

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It proves nothing to learn that in 1857 the endowment of Randolph-Macon College was but a few thousand dollars less than that of Harvard, but it starts us to thinking on the spreading losses of the war between the States.—Alan Gregg in *Challenges to Contemporary Medicine,* Columbia University Press, 1956, p. 89.

Changing Concepts in the Treatment of Patients with Cleft Lip and Palate

N. G. Georgiade, D.D.S., M.D.
Durham

Many diverse views relative to the initial care of the newborn infant with cleft lip and palate have evolved over the past years. These facial deformities present not only a considerable cosmetic and functional problem but also one of extreme psychologic distress to the parents. Although the lip deformity has been repaired, the collapse of the maxillary segments, associated many times with severe cleft of the lip, creates further problems for the maturing child.

For the past 12 years a number of Swedish and German plastic and maxillofacial surgeons have been interested in the prevention of further facial deformities in this group of newborn infants and in the possible correction of maxillary deformities. They have initiated a new approach to the problem, and it has been my good fortune to visit these many excellent clinics over the past few years. Their concepts are discussed more completely elsewhere[1]. We have incorporated these newer techniques in our overall management of this type of patient, which also includes an initial evaluation and continued follow-up care by our entire cleft-lip-palate team, including the speech pathologist, orthodontist, child psychologist, and audiologist.

Preoperative Management

Habilitation of patients with congenital deformities of the oro-facial area may present a number of problems in management before any reconstructive surgery can be undertaken. It is during this phase that the physician initially must be able to advise the parents as to the timing of future reconstructive surgery as well as the proper feeding of the infant both before and after operation.

A systematic plan for feeding must be considered. This may be a difficult problem, particularly in infants with severe bilateral clefts of the lip and associated clefts of the alveolar ridge and palate. The most satisfactory method of managing this type of infant entails feeding it while maintaining an upright position by cradling. This technique minimizes the amount of regurgitation of the liquid formula which occurs (Fig. 1).



Fig. 1. The feeding of a new-born infant having a severe bilateral cleft of the lip and palate is carried out as shown, with the infant in a semi-upright position utilizing a rubber-tipped Chetwood syringe.

An Asepto type of syringe with flexible rubber tubing is used to drop the fluid onto the posterior aspect of the tongue. A special type of nipple having a rubber guard can also be used with the large palatal clefts. A small plastic nasogastric tube can be employed in extreme situations.

The formula used successfully in the newborn contains 31 ounces of milk, 21 ounces of water, and 4 tablespoons of suitable carbohydrate. The use of one of the many canned formulas can also be done. The infants should be fed every few hours in order to give them the maximum intake with minimal regurgitation.

Prosthetic appliances

In order to prevent collapse of the maxillae before and after operation, the cleft lip-

From the Department of Surgery, Division of Plastic, Maxillofacial and Oral Surgery, Duke University Medical Center, Durham, North Carolina.



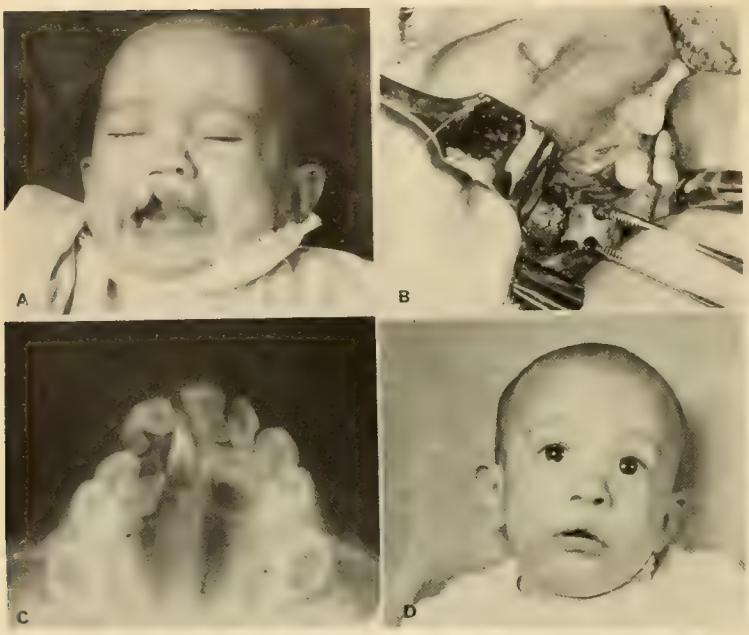
Fig. 2. A and B. Small plastic trays with elastic impression used for accurate reduplication of the facial deformity. C. Preoperative appearance of patient. D. The acrylic prosthesis is used to maintain an adequate maxillary width prior to surgery. E. Postoperative appearance of the same patient following one-stage bilateral lip repair. (Prosthesis is still maintained orally for three to four months after bone grafting of alveolar clefts.)

palate infant should be examined as soon after birth as possible for proper evaluation as to the advisability of fitting with a suitable appliance. Impressions of the arches are easily taken on an outpatient basis without anesthesia when the infant is first seen as early as possible after birth (Fig. 2 A,B).

From these impressions stone study models are made and, if necessary, a suitable appliance is designed and constructed. If it is considered desirable to maintain the arches in their present position until surgery can be carried out, a solid type of acrylic prosthesis can be constructed. If expansion of the arch is desirable because of previous collapse, an appliance can be constructed incorporating one of a number of expansion devices. In this manner a suitable arch form can be obtained and maintained until such time as bone grafting of the alveolar cleft can be carried out[2]. This appliance is maintained in the oral cavity by utilizing some of the newer softer plastics and adhesives for adherence to the undercuts above the palatal and alveolar cleft (Fig. 2 D). The appliance is removed and refitted once a month up to and following surgery as previously outlined.

Surgery and Anesthesia

The age of the patient at operation may vary from a few weeks to four months, depending on the type of deformity and body weight. For less complicated reconstructive procedures a weight of 10 pounds is considered desirable for oral endotracheal anesthesia and the necessary surgery to be undertaken.



A. Preoperative appearance of infant with unilateral cleft of lip and alveolus. B. Insertion of autogenous rib graft contoured to fit alveolar defect. C. Roentgenogram of maxillae one year following lip repair and bone grafting, showing migration of tooth buds into grafted area. D. Postoperative appearance of the same patient.

Figure 3



A. Severe unilateral cleft of the lip, alveolus, and palate at the time of simultaneous repair of lip, and palatal and alveolar area. B. A sculptured solid strut of rib bone is shown prior to insertion across alveolar cleft. C. Rib graft now in place and covered with a vomer flap prior to covering with lateral flaps during repair of the lip. D. Photograph of patient six months following repair of lip and alveolar cleft.

Figure 4

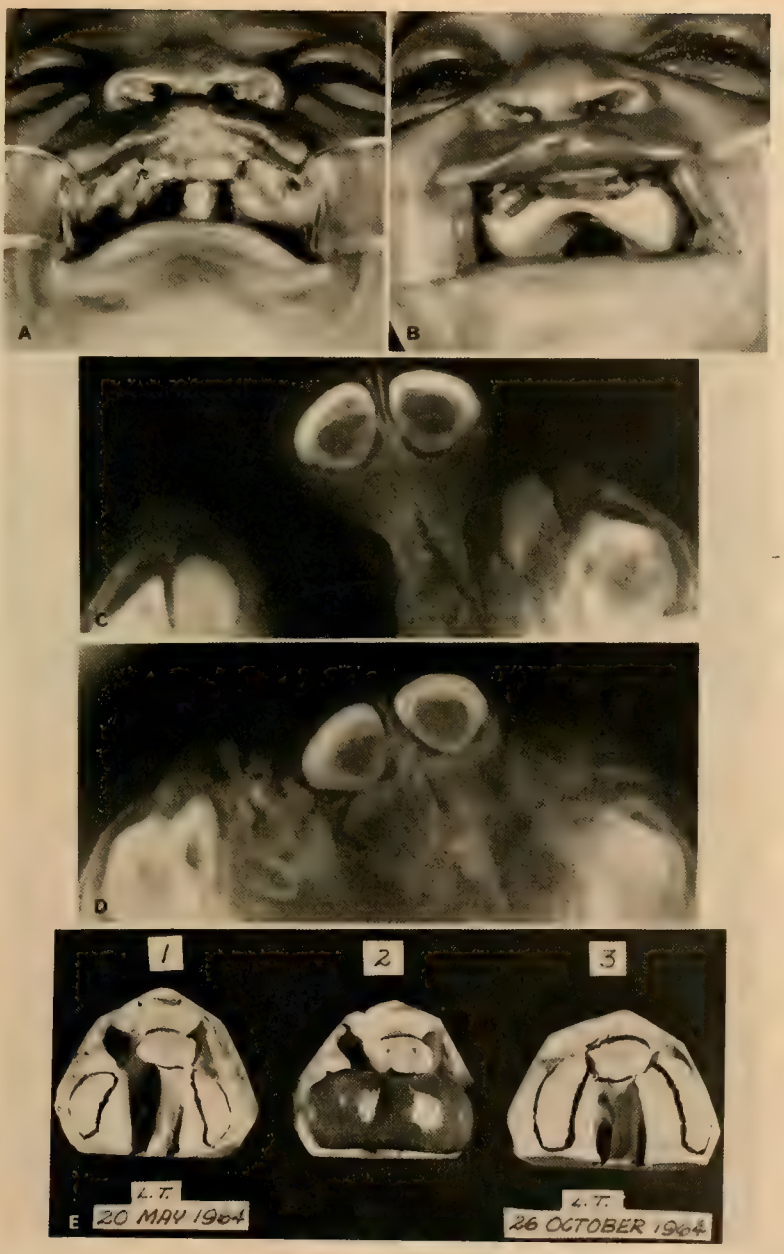


Fig. 5. A. Photograph of patient previously shown in figure 2 now shows the premaxilla in position following bone grafting with excellent continuity of the maxillary arch. B. The palatal prosthesis is shown in place, stabilizing the arches after bone grafting. C. Preoperative roentgenogram of this patient, showing bilateral clefts. D. Postoperative roentgenogram showing filling of bilateral alveolar cleft with autogenous bone (two stages). E. Study models of this infant from time treatment was instituted to completion six months later. Note lack of maxillary collapse in final model.



Fig. 6. A. Unilateral cleft of the lip and alveolus. B. Postoperative appearance of patient 14 months after lip repair and bone grafting. C. Prosthesis in place following bone grafting to maintain maxillary arch in desired position. D, E, and F. Roentgenograms of cleft made before, immediately after, and five months following insertion of bone graft bridging alveolar cleft.

The recent addition of autogenous bone grafting to alveolar clefts concomitantly with lip repair has about doubled the operative time, and as a result it is desirable that surgery be delayed until the infant is older and larger.

Repair of unilateral cleft lip

All of these patients must have available a venous cannula or "cutdown" for adequate fluid and blood replacement as indicated. The blood volume in small infants is estimated to be approximately 45 ml per pound of body weight, and a loss of only 75 ml of blood in a 10-pound infant may therefore represent a loss of 15 per cent of the total blood volume. A hemoglobin level of 10 gm or more should be considered as a minimal preoperative requirement.

Repair of a unilateral cleft lip in our hands represents a combination of techniques described previously by others, and excellent cosmetic and functional results can usually be attained[3-6] (see Figs. 3 and 4).

Repair of bilateral cleft of the lip

Repair of both clefts should be carried out in one stage if at all possible. Preoperative prolabial presure applied intermittently may be necessary to position the prolabium satisfactorily. Use of the prolabium as part of the central lip repair appears to give the most satisfactory result, both functionally and cosmetically[7, 8] (Fig. 2 C,E).

Alveolar cleft

If an alveolar cleft is present either unilaterally or bilaterally, it should be closed and, where practical, autogenous bone grafting should be used to bridge the cleft and restore the continuity of the arch. In many instances, particularly with a bilateral alveolar cleft, simultaneous bone graft is not

possible. However, vomer flaps as well as labial flaps are used to prepare the alveolar area for bone grafting, which is then carried out in a second stage (Figs. 4 and 5).

Postoperative Care

Relaxation of the operative area is obtained by utilizing a Logan bow or collodion gauze dressing immediately after the operation. Elbow restraints are utilized for the first two weeks to prevent finger sucking which would disturb the operative area and possibly cause wound disruption. Feeding by means of a rubber-tipped Asepto syringe is carried out for three weeks postoperatively before attempting feeding with a nipple.

Summary

1. Unilateral and bilateral clefts of the lip unassociated with alveolar cleft defects are usually repaired when the infant weighs at least 10 pounds and has a hemoglobin of at least 10 gm.

2. Alveolar clefts associated with cleft lips should be repaired when practical at the time of the original lip repair, which is usually done when the patient is four or five months of age. Of necessity, very wide clefts must be closed and autogenous bone grafting carried out in two operative procedures[9].

3. Use of plastic prosthetic appliances before, during, and after repair of the bony maxillary defects appears to be important in eliminating some of the severe maxillary collapses and deformities seen in the past.

4. Repair of palatal clefts is carried out when the patient is about two years of age.

5. The multidiscipline approach as described appears to offer the best means of treatment.

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What I see of greatest importance is that the immense progress of medicine in the past hundred years has come from the advancement of precise and dependable knowledge. Progress in the next hundred years will continue to depend on gains of precise and dependable knowledge. Such knowledge is necessary but not sufficient. We must also face the fact that we seem to understand neither the accomplishments nor the potentialities of medicine and are unwilling, therefore, to pay for it.—Alan Gregg in *Challenges to Contemporary Medicine,* Columbia University Press, 1956, p. 16.

Late Extrauterine Pregnancy
Report of a Successful Case

James E. Oliver, M.D.
Sylva

While pregnancy outside the uterine cavity is not rare, it is sufficiently unusual in the average population to cause considerable interest. Living fetuses outside the uterus become progressively more uncommon in the later months of gestation, so that ectopic pregnancy with viable fetuses of 28 weeks or more is a distinct rarity. Authorities have given the ratio of living fetuses delivered after seven months' gestation as 1 to 15,000 or more live births. When one considers the high maternal and fetal mortality in these late deliveries, and the extremely high rate of deformities in the babies that do survive, the successful delivery of an abdominal fetus at term with no maternal complications and a completely normal baby is worth reporting even though the result is obviously largely a matter of good fortune, only assisted by normally good obstetric care.

It must be emphasized that statistics on this subject are based on small series and collected reports from all over the world[1-15]. Some of the authors used 22 weeks' gestation as a criterion for fetal viability, while no fetus from an abdominal pregnancy of less than 28 weeks has survived. Most authorities use seven months as a minimum term for survival, but they base this conclusion on overall figures compiled from previous reports. They often note that in some of their collected cases, no mention was made of the postpartum condition of the mother, and often none of the fetal development and length of survival after delivery. Most of the recent reports use seven months' gestation and eight days' survival in defining viability of fetuses, but even these statistics with a sound basis for reporting are so small that exact figures from them are apt to be more misleading than informative. For this reason few specific figures are being quoted.

Incidence

The incidence of eccyesis varies a great deal in reported series, and is apparently considerably affected by race and the condition of the fallopian tubes. Campbell reported one ectopic pregnancy to 167.4 intrauterine pregnancies in one series, while Ward found 1 ectopic gestation to every 140.6 uterine gestations in white women and 1 to 95.8 in Negroes. Grant[4], working in the sterility clinic of the Women's Hospital in Sidney, Australia, found that 2.4% of pregnancies were ectopic. Bobrow and Bell[6], reporting on 905 cases of ectopic implantation in a 16-year period at the Harlem Hospital in New York, found 1 ectopic pregnancy to 64.2 live births. None of these in the Harlem series reached the age of viability. Twenty-two of the 905 were abdominal, 882 were tubal, and one was ovarian. Also included in this series were bilateral tubal pregnancies, simultaneous intra- and extra-uterine pregnancies, and one unilateral twin tubal pregnancy.

Ectopic gestation carries with it a very poor prognosis as to future pregnancies. Grant[4] reports that on the basis of a review of the world literature, only 15% to 30% of women having had ectopic pregnancy later give birth to children; however, of those who succeeded in carrying one fetus to term, many subsequently had multiple successful births. In fact there are on record several cases of women who had abdominal pregnancies that were undelivered and who carried the fetal skeleton for periods from 6 to 26 years, but who nevertheless had several successful intrauterine pregnancies carried to term.

Probable Mechanism

The mechanism by which succesful implantation occurs outside the uterus is almost impossible to determine, but since it is

generally considered extremely difficult for the chorion to become attached in an unfavorable location, it is thought that the majority are implanted at an obstructed point in the tube, whether the obstruction is caused by stricture, spasm, or endometriosis. It is then probable that as the fetal mass grows beyond the limits of its environment, partial tubal abortion occurs; and while some remnant remains in the original location, reimplantation occurs on any available peritoneal surface in the pelvis and adequate fetal circulation is established by an abnormal parasitic attachment.

With the passage of time, the possibility of ultimate fetal survival increases as the fetus approaches or passes the normal term of gestation, while the danger to the mother correspondingly increases with fetal growth. With relatively unlimited room for growth in the free abdominal cavity, and without the normal mechanism of expulsion by the uterus, it is probable that in primitive communities these abdominal fetuses are frequently carried considerably beyond term. In fact Ware[3] reported a viable fetus of 10 months' gestation weighing 10 pounds 3 ounces, and another weighing 11 pounds 1 ounce four to five weeks beyond term.

The sites in which implantation has occurred and in which these hardy fetuses have survived despite their unfavorable surroundings are so many and varied that only a few can be mentioned. Cases have been reported in which the fetus ruptured one horn of a bicornate uterus and developed in the abdominal cavity while maintaining its placental attachment in the uterus. Other cases have ruptured a scarred uterus and developed to term in the abdominal cavity. Tubal adenomyosis has been proved in a good percentage of the cases of ectopic pregnancy, and it is probable that this provides a favorable site for implantation in some instances. Fertilization of an ovum within the ovary has been known to occur and to be followed by a fair number of fetal survivals to term. It may be possible that primary implantation occurs in the peritoneal cavity, when fertilization takes place before the ovum reaches the tube and its movement is interrupted. Attachment to endometrial implants seems possible but cannot be proved.

Prognosis

While ectopic gestation carries some increased hazard even when treated early and well, maternal mortality has been placed by some writers at 1.7%, and that figure has been reduced with the general improvement in surgical care. However, danger to the mother in abdominal pregnancies at term is much higher, and the reported mortality in different series ranges from 14% to more than 30%, although that figure, too, has probably been lowered with the general improvements in surgical techniques.

The availability of more adequate blood supplies for transfusions, and the use of antibiotics, have contributed to the safety of the operation. Acceptance of Beck's suggestion that as much as possible of the placenta and membranes be left for absorption in the peritoneal cavity has avoided the profuse hemorrhage caused by forcible removal of villous attachments, and the increased probability of postoperative infection, especially when implantation has occurred on intestines.

It is probable that many abdominal pregnancies are not recognized in communities where medical care is below par, and while this situation results in 100% loss of babies, it is fair to assume that most of the mothers survive with only moderate disabilities in the natural evolution of retained pregnancies.

1. Skeletonization or retention of fetal bones only.
2. Adipocere formation or replacement of soft parts by fats and soaps.
3. Suppuration or abscess formation due to infection.
4. Lithopedian or sterile calcification of the fetus.
5. Spontaneous expulsion of fetal parts via the bladder, rectum, vagina, or abdominal fistulas.

The prognosis is still worse for the fetus than for the mother. No case has been reported in which the fetus survived after less than 28 weeks' gestation, and of those surviving longer than seven months, only 25%

to 50% have lived eight days or longer after birth. Although development was frequently not stated in these reports, it has been variously stated that approximately 25 to 50% of the babies surviving more than one week had some major deformity. Since considerable overlapping occurred in the series of collected cases, and the percentage of deformity varied from 10% to 77% of viable babies, no reliable conclusion can be drawn as to prognosis in the individual case.

Diagnosis

The diagnosis of late abdominal pregnancy is difficult chiefly because it is so rare that it is not suspected. Few obstetricians see more than one in a lifetime of practice except in the large medical centers, to which a high percentage of patients are referred because of undiagnosed complications. Even in these circumstances it is said that the diagnosis is often made only at laparotomy, when it is recognized that spontaneous delivery is not possible. However, when extrauterine pregnancy is suspected, diagnosis is usually possible on the basis of the signs and symptoms recorded by numerous authors.

There is usually a history of lower abdominal pain and slight vaginal bleeding or spotting occurring from six weeks to two months after the last normal menstrual period. This is often ignored by the mother, however, and occasional slight vaginal bleeding may continue for several months, being misconstrued as a minor complication of pregnancy. Pain is usually more prominent than with intrauterine pregnancy, and, especially in the later months of gestation, seems to be associated with fetal movements. There are usually gastrointestinal disturbances including anorexia, constipation, and occasionally nausea; but these, too, are frequently taken for granted by the patient. Ware, who has had more experience than most authors with this condition, mentions severe constipation and weight loss as two of the most common points in the history of late extrauterine pregnancy.

Physical signs of late abdominal pregnancy usually include an abnormal fetal position with a high presenting part well above the pelvic inlet. On physical and x-ray examination the fetus is usually found to be poorly flexed although in some cases with thick membrane, flexion is within normal limits. The fetal heart sounds are usually more easily heard and fetal movements usually more easily felt than normal. The cervix of the uterus is usually high and firmer than at term with an intrauterine pregnancy. The cervix is usually closed or at the most is open less than one finger in diameter. If a vaginal examination is done, it is said to be often possible to feel the fetus well above the palpable fundus. Braxton-Hicks contractions are, of course, not palpable. If the correct diagnosis is suspected, a dilute solution of oxytocin can be given slowly by intravenous drip in an attempt to elicit palpable uterine contractions over the fetal mass.

Some of the roentgen signs that have been listed are as follows[16]:

1. Absence of the uterine shadow (which may be missed in some instances, however, because of the thickness of the shadow of the membrane sac).
2. Bizarre shape of the fetal head on the film.
3. Extension or strange position of fetal limb and fetal mobility in the abdominal cavity.
4. Abnormally high position of the fetus in the abdomen and a transverse position remaining constant on subsequent examinations.
5. Fetal parts visualized immediately beneath the abdominal wall in the lateral view, with abnormally thin soft tissue covering the fetus due to the presence of the amniotic sac rather than the uterus.
6. Unusually clear delineation of fetal parts and maternal gaseous shadows overlying and intermingling with these parts.
7. Fetal parts overlapping vertebral shadows in the lateral projection.

Hysterograms may be obtained in doubtful cases by injecting a contrast medium into the uterine cavity before making the x-ray examination. This procedure is considered somewhat hazardous, however, and the author warns that the obstetrician

should be ready to deliver the baby on the same day in case natural labor is precipitated by the intrauterine manipulation.

Aortography has been suggested as a diagnostic test because it shows lack of the usual physiologic displacement of the uterine arteries if the fetus is outside the uterus.

Treatment

There is considerable disagreement as to the treatment in abdominal pregnancy:

1. Some obstetricians feel that laparotomy is indicated as soon as the diagnosis is made even if the fetus is not mature, justifying this position on the high maternal mortality rate at term and the poor fetal salvage rate even though they are carried to term.

2. Others feel that if a definite diagnosis of abdominal pregnancy is made, laparotomy should be deferred until the fetus has reached the age of probable viability.

3. Some have recommended that the fetus be allowed to die in order to minimize the bleeding from the site of placental implant. This attitude, however, is generally considered indefensible since it completely precludes the possibility of fetal survival.

In 1919 Beck found experimentally that the normal placenta can be absorbed from the peritoneal cavity in animals without harm to the animal. He recommended that the placenta be left in situ in cases of abdominal pregnancy if the blood vessels could not be easily ligated, and that the wound be closed without drainage. Leaving the placenta attached has apparently resulted in considerably lower maternal mortality, but closing the abdominal wound without drainage seems questionable. In several cases reported in the literature, drainage of infected material has developed after closure, and it seems probable that this complication could have been prevented by drainage at the time of the operation. When the placenta is attached to the intestine, infection would seem to be more probable, and in such cases drainage, together with the use of antibiotics, would appear logical.

Case Report

The patient was a 31-year-old Negro woman who is known to have had one previous pregnancy terminating with a full-term living infant in 1951. This was a home delivery, and the only record is that furnished by the mother's memory.

The patient first came to the office on February 12, 1964, complaining of upper abdominal discomfort, poor appetite, and general malaise. The physical examination and history suggested pregnancy, her last menstrual period having occurred December 19, 1963. The patient was not certain of this date, but assuming that she was correct, the estimated date of conception would have been September 25, 1964. On examination fetal heart sounds could not be heard, but a placental bruit was heard and the patient was treated as though she were pregnant.

The patient was not seen again until March 30, 1964, at which time she complained of epigastric pain and nausea and tenderness in the epigastrium. Examination at this time failed to reveal any abnormalities of the suspected pregnancy.

First admission

The patient was next seen at the emergency room of the local hospital on July 28, 1964, complaining of abdominal pain and of leaking fluid for the past 12 to 14 hours. Physical examination at this time revealed a fetus in vertex presentation, and fetal heart sounds at 132 per minute in the right lower quadrant. The fetus was fairly high in the abdomen, but it was thought that the pregnancy was probably normal.

The patient was admitted to the maternity ward of the hospital because it was felt that she was in active labor. At this point we had our first suspicion that we were dealing with an abnormal pregnancy. The head of the fetus was now low in the pelvis, ordinarily regarded as station plus two; however, the cervical os could not definitely be identified, and it was apparent that the presenting part was felt through the posterior vaginal wall. The pain was sporadic and quite severe, and was centered immediately above and to the right of the umbilicus. No uterine contractions were noted. After 24 hours of bed rest her pain had subsided and there was no leakage of fluid. There was no bloody show, and fetal heart sounds remained of good quality at 132 to 136 per minute. In view of the fact that the expected date of confinement was rather indefinite, she was discharged.

Second admission

She was again seen on August 5, 1964, complaining of similar abdominal pains which she felt were labor pains. At this point it was quite obvious that we were dealing with an abnormal pregnancy. No uterine contractions were palpable. The small parts of the baby could be felt more easily than would be expected normally. Also, at this time vaginal examination revealed that the baby's head was wedged in the pelvis and that the presenting structure was the pos-

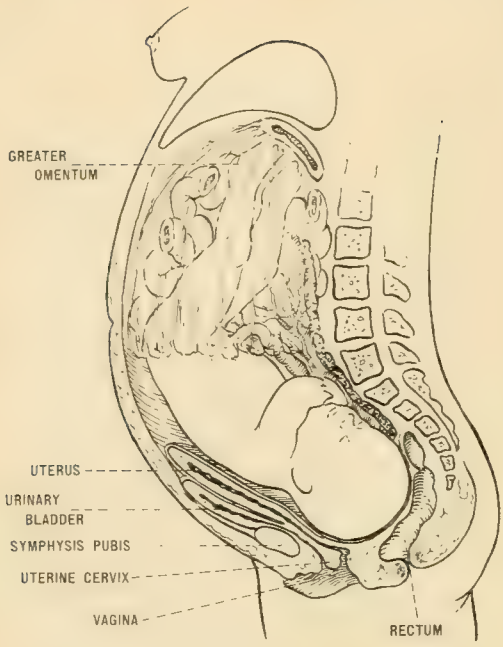


Figure 1

terior vaginal wall. The uterine cervix was high above the symphysis pubis and was not dilated more than a single finger tip. At this point the patient was seen in consultation by the chief of the obstetric service, who felt that we were dealing with an extrauterine pregnancy.

Consultation with the radiologist elicited the opinion that the fetus was somewhat immature but probably of about 8½ months' gestation. He noted that he could not outline the uterine wall nor the placenta, which ordinarily would be possible with a normal pregnancy, but he remarked that delivery from below was probably feasible.

In view of the unusual physical and x-ray findings, it was decided to perform a cesarean section, and this procedure was carried out the same day.

Operative course

At operation the baby was found to be outside the uterus. It was lying in a vertex presentation, with the occiput anterior. The head was wedged well within the pelvis. The uterus lay immediately above the baby's head, but below the bladder; it was slightly enlarged and soft but certainly not pregnant. The baby was lying immediately under the greater omentum, and there were no membranes nor amniotic fluid.

The baby was extracted manually with little effort, and breathed and cried spontaneously before the cord was clamped. It weighed 5 pounds 14 ounces. Immediately after the cord was clamped, there was massive hemorrhage which necessitated clamping and ligating a considerable portion of the placenta. No effort was made to dissect the placenta free from its multiple attachments, which included the left ovary, the left tube, the sigmoid and transverse colon, the right tube, the right ovary, and almost all of the pelvic peritoneum. The hemorrhage came almost entirely from the vessels between the placenta and the left tube and ovary. Following clamping and ligation the bleeding stopped, and the patient's blood pressure and pulse became stable after multiple rapid transfusions. As noted elsewhere, it is generally considered preferable to leave the placenta in place, but in this case it was felt necessary to ligate and remove the part that was bleeding. This was done, and the bleeding stopped immediately.

Postoperatively both the patient and the infant did quite well. The patient had a marked degree of abdominal distention, but for some reason apparently was not uncomfortable. She remained afebrile and at the time of discharge from the hospital she still had no uterine bleeding, the distention was gone, and she was remarkably free of the symptoms that could be expected to follow major abdominal surgery.

Follow-up

She was seen four weeks later in the office for routine follow-up examination. At this time she gave no history of any vaginal bleeding nor of having passed any tissue from the uterus. There was no longer any abdominal distention, and bowel movements were reported as normal. There was no urinary infection nor other com-

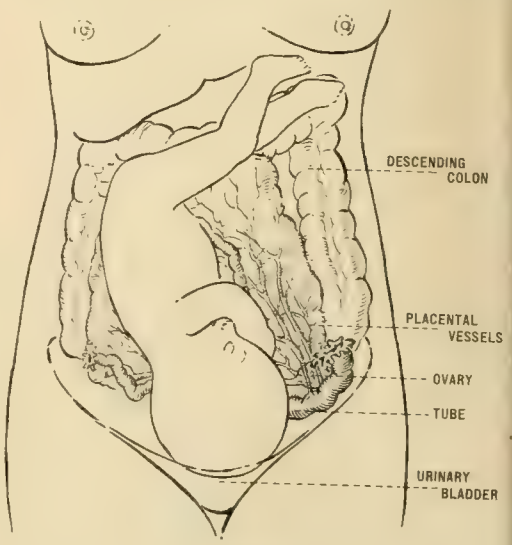


Figure 2

plaint, and the patient was eating well and fully active. She has not been seen since this examination.

The infant when last seen was well developed and healthy. The head had recovered from the extensive molding which was apparently due to being wedged within the pelvis. So far as is known, both the mother and the child are still well and healthy, completely free of any congenital or other physical abnormalities.

Summary

Most of the available literature on extrauterine pregnancy in general and late abdominal pregnancy in particular are reviewed. It is pointed out that the personal experience of any one author is necessarily limited because of the rarity of abdominal pregnancies that reach the age of viability.

There is considerable overlapping in collected reports, and the available information, especially as regards the development and survival of the fetuses, is limited. Some authors used 22 weeks' gestation as a criterion of late abdominal pregnancy, but no case of survival has been recorded under 28 weeks of gestation.

Conjectures as to the mechanism of successful placental implantation in the abdominal cavity are presented, and diagnostic signs and symptoms are cited from various authors.

The fate of unrecognized, retained pregnancies and the high percentage of deformities in surviving infants are summarized from available literature.

Beck's recommendation that the placenta and membranes be left in the abdominal cavity is noted, but it is pointed out that hemorrhage must be controlled at any point from which spontaneous separation occurs; thus it seems advisable to remove as much as possible of the fetal membrane not intimately attached to maternal viscera.

An additional case is reported in which an apparently completely normal infant was delivered by cesarean section and in which the mother has had an uncomplicated recovery.

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It is not an answer to say that more students apply for entrance to medical school than are admitted. One needs only remember the Greeks' observation that only two groups in society can kill human beings with impunity: judges and doctors. This observation points to some emphasis upon the quality we can rightly require of medical students as well as upon the number.—Alan Gregg in *Challenges to Contemporary Medicine,* Columbia University Press, 1956, p. 67.

Infectious Mononucleosis
A Summary of Fourteen Cases and Review of the Literature

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Infectious mononucleosis, now a universally accepted clinical entity, was first described by Filatov[1] in 1885 as cervical lymphadenopathy of unknown etiology. In 1889 Pfeiffer[2] reported this disease in children, calling it *Drusenfieber*, or glandular fever—a term still in use today, especially in Europe. In 1915 Baetzer first used the term "infectious mononucleosis," but this was not generally accepted until Sprunt and Evans[3] reintroduced it in 1920.

As early as 1909 Burns[4] reported an epidemic of glandular fever and mentioned the elevation of the leukocyte count. The presence of atypical lymphocytes in probable cases of infectious mononucleosis had been reported sporadically prior to 1923[5,6], but the hematologic characteristics of the disease were not emphasized until Downey and McKinlay[7] described it in detail and classified the types of abnormal lymphocytes involved.

In 1932 Paul and Bunnell[8] discovered the rise of heterophile agglutinins and hemolysins against sheep erythrocytes in the sera of patients with infectious mononucleosis. The specific absorption characteristics of the infectious monoucleosis antibodies were described by others later[9-11]. After more than 70 years since Filatov's time, the etiology of this disease is still unknown, though our knowledge of its clinical, hematologic, and serologic aspects has broadened.

Infectious Mononucleosis in Children

The early description of infectious mononucleosis was mainly as a highly infectious disease of childhood, characterized by fever, malaise, cervical lymphadenopathy, and leukoyctosis[4, 12,13]. In 1921 Tidy[14] calculated that at least 80% of the recorded cases of glandular fever up to 1920 were in patients under the age of 12 years. In 1940 Bernstein[15] stated that 81% of the 64 patients encountered by him were within the age range of 15 to 30 years. In recent years most investigators have agreed that the disease is prevalent among young adults[16-21]; however, opinions on the incidence in the pediatric age group vary[20-26]. A review of reported

For editorial comment see page 123

cases by different investigators shows that the incidence in children ranged from 1.5%[24] to 37% or more[27]. In view of the prevalence of respiratory infections, especially of viral origin, in children, such clinical manifestations as fever, sore throat, malaise, lymphadenopathy, and lymphocytosis are common to many diseases. For this reason, infectious mononucleosis may often be misdiagnosed.

Material

Fourteen cases of infectious mononucleosis in children admitted to the pediatric service of North Carolina Baptist Hospital will be reviewed and considered in the light of other reports. This represents the total number of cases so diagnosed within the period of May, 1944, through October, 1960—an incidence of less than one case per year. No epidemic was associated with any of the cases, although three of the patients were residents of a local children's home (population approximately 300).

Since the diagnosis in these cases was not made by a single person, certain variations of opinion occurred.

Diagnosis

The common signs and symptoms were fever, sore throat, anorexia, malaise, headache, and lymphadenopathy. Pharyngeal inflammation was a common finding. Splenomegaly and hepatomegaly, when present,

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were supportive evidence of the diagnosis. Less frequently encountered were abdominal complaints, cutaneous rash, jaundice, and signs and symptoms related to the central nervous system.

Absolute or relative lymphocytosis and the presence of atypical lymphocytes were considered essential to the diagnosis. The duration of these findings is not discussed, since follow-up studies were often inadequate.

Heterophile antibody titers were determined in all cases. Davidsohn's method[12] was employed for the presumptive test. Absorption studies with guinea pig kidney tissue and beef erythrocytes were performed according to Stuart's method[28]. A titer of 1:56 was considered significant as long as the absorption studies demonstrated the antibodies to be characteristic of infectious mononucleosis. Unfortunately these studies were not done in all cases.

It should be stressed that all three of the above criteria are essential to the diagnosis of infectious mononucleosis. The presence of atypical lymphocytes or the heterophile antibody rise alone has been seen in other diseases[29-33] and are therefore nonspecific.

Incidence

The number of children with infectious monocucleosis admitted to North Carolina Baptist Hospital during this 16-year period is rather small. With the exception of Case 13, no outpatients were included in this series. The low incidence may indicate that the actual number of children having infectious mononucleosis is low, or that the disease is so mild in this age group that hospitalization is seldom required.

Prior to the clinical application of heterophile antibody determination for the diagnosis of infectious mononucleosis, "glandular fever" was described as a disease of childhood. Diagnosis was based on the clinical manifestations alone[4, 34, 35]. In recent years Hoagland[24], with his rigid diagnostic criteria, encountered only 3 cases in children among 200 cases, while Gachet[23] believed that the disease was common in this age group. Other reports on the incidence in children have ranged from 11.8% to 39.5% of the total cases[36-41]. The diagnostic criteria were not uniform among the various investigators. Review of the cases reported in the English literature from 1950 to 1960 revealed 112 cases in patients under the age of 14 years[45-79]. Undoubtedly this does not represent the total number of pediatric cases reported during this period, but it is much less than the number of cases reported in the adult population.

Opinions vary widely as to what criteria are essential to the diagnosis of infectious mononucleosis. Adherence to rigid criteria accounts for the lower incidence among children reported by some authors. Others define the diagnosis more loosely. For example, a recent study by Strom[27] implies that the incidence has increased since 1940, especially among children. Thirty-seven per cent of his cases were in children, but only 50% of his patients gave positive reactions to Paul-Bunnell tests for heterophile antibodies. Bennike[22] reported 166 cases of the disease, representing 20% of all patients admitted to a hospital with the symptoms of tonsillitis during the period of October, 1948, to February, 1949, but only 68% of these patients had elevated heterophile antibody titers. These examples demonstrate that the reported prevalence of this disease is inversely proportional to the rigidity of the diagnostic criteria employed.

Age and sex distribution

The age of the patients in the present series ranged from 3 to 12 years. No infant was encountered, and 6 of the 14 patients were 10 years of age or older. Eight patients were females and 6 were males. No marked difference in the sex distribution of the cases has been noted in the literature.

Transmission

Patients Nos. 4 and 5 of the present series are siblings. It is rather unusual to encounter two cases of infectious mononucleosis in the same family.

Since the etiologic agent of infectious mononucleosis has not been identified, the mode of transmission is obscure. Attempts at experimental transmission by injecting normal individuals with blood drawn from patients have failed[80-81]. The disease has rarely been known to occur in roommates

Table 1

Summary of 14 Case Reports of Infectious Mononucleosis in Children

Case No.	1	2	3	4	5	6
Age (yrs.)	12	5	11½	3	4½	7½
Sex	F	F	F	F	F	F
Duration of illness PTA	1 month	4 months	6 days	11 days	1 day	5 days
Presenting symptoms and signs	Malaise Cervical adenopathy Fever Myalgia	Sore throat Fever Anorexia Weight loss	Fever of Unknown Origin	Fever Cough Earache	Fever "Cold" Earache	Fever Dyspnea Sore throat Cervical lymphadenopathy
Duration of hospitalization	8	4	6	7 10	5	13
Clinical manifestation						
Fever	+	+	+	+	+	+
Lymphadenopathy	+	+	+	+	+	+
Lymph node tenderness	+	−	−	−	−	−
Sore throat	−	+	−	−	−	+
Pharyngeal inflammation	−	+	+	+	+	+
Tonsillar enlargement	+	+	+	+	−	+
Anorexia	+	+	−	−	−	+
Malaise	+	−	−	+	+	−
Headache	−	+	+	+	+	+
Splenomegaly	−	+	+	+	+	+
Hepatomegaly	−	−	−	+	−	+
Skin rash	−	−	−	−	−	−
Periorbital edema	+	−	−	−	−	−
Abdominal pain	+	−	−	−	−	−
Cough	−	−	−	+	+	+
Miscellaneous	Generalized aching	−	−	Earache	Earache	−
Hematologic Manifestations:						
WBC $10^3/mm^3$	8.9-13.0	8.8-9.8	5.0-8.0	7.8-10.6	6.0	12.5-27.0
Highest % Lymphocytes	76	48.5	66	78	20	91
Atypical lymphocytes	15	Present	"Many"	Present	None	Present
Eosinophils	1	8.5	1	3	0	0
Remarks				Mild anemia Hgb. 9.5 gm.	Poly 47% Band 29%	
Serologic manifestations:						
Heterophile titer unabsorbed	1:80	1:112	1:320	1:112	1:112	1:896
abs. with GPK*	−	−	−	−	−	1:14
abs. with BRBC†	−	−	−	−	−	neg.

*Guinea pig kidney
†Beef erythrocytes

Table 1

Summary of 14 Case Reports of Infectious Mononucleosis in Children

7	8	9	10	11	12	13	14
5	10-11/12	3-10/12	6-5/12	13-2/12	11 3/12	10	5-6/12
F	M	F	F	F	M	M	M
9 days	3 weeks	5 days	4 days	2 months	5 weeks	10 days	1 week
Sore Thorat Fever Stuffy nose	Fever Malaise Anorexia Headache	Malaise Anorexia Fever N + V	Fever Sore throat Dyspnea Lymphade-nopathy	Urticaria Migratory joint pain	Sore throat Hoarse voice Headache Fever Dyspnea	Unexplained lymphade-nopathy	Generalized urticaria Sore throat Fever
3	5	7	9	5	10	–	7
+	+	+	+	+	+	+	+
+	+	+	+	+	+	+	+
–	+	–	–	–	+	+	+
+	+	–	+	–	+	–	+
+	+	–	+	+	+	–	+
+	+	–	+	–	+	–	+
–	+	+	–	–	+	–	–
–	+	+	–	–	+	–	–
–	+	+	–	–	–	–	–
–	+	+	+	–	–	–	–
+	+	+	+	–	–	–	+
–	–	–	–	–	–	–	+
–	–	–	–	+	–	–	+
–	–	–	+	–	–	–	+
–	–	–	–	–	+	–	–
Gener-alized aching	Gener-alized aching	N + V	–	– Joint pain	–	–	– Conjuncti-vitis
9.0	8.0-13.0	2.8-7.8	12.0-22.4	5.3-8.7	8.7-15.1	9.0-11.0	13.0-18.2
58	85	84	73	64	68	81	78
9	30-40	15	"Many"	50	38	50	20
0	2	3	0	1 Poly 84% at onset	1	4	0
1:112	1:112	1:80	1:112	1:448	1:3584	1:224	1:28
1:28	1:28	–	Neg.	1:56	–	1:14	1:14
Neg.	3:7	–	1:28	Neg.	–	Neg.	Neg.

or cause cross-infections in hospital wards[80,82], but the high incidence among college students[81,83] and in the Armed Forces[80, 83, 84] suggests an infectious process. Hoagland[81] considered intimate oral contact the major means of transmission.

Among children, no epidemic fulfilling the strict diagnostic criteria has been reported. Tidy[25] considered the adult form of the disease to be moderately infective and the juvenile type even more so. Blanton[85] recently reported a local outbreak of disease associated with two cases of proved infectious mononucleosis. The epidemic and sporadic forms of the disease are thought to be two disease entities by some and two phases of a single disease by others.

Clinical Manifestations

The presenting symptoms and signs of the 14 patients in the present series are listed in Table 1. Fever, sore throat, and lymph-node enlargement were the most common complaints on admission. Anorexia was also common. The duration of illness prior to admission ranged from one day to five weeks; in five cases this period was longer than three weeks. Five patients were referred to the hospital because of difficulty in reaching a diagnosis.

The incidence of symptoms and signs in this series is quite similar to reports by other investigators[16, 19, 24, 68]. Fever, lymphadenopathy, pharyngeal inflammation, and headache were the most common presenting symptoms[21, 24]. All patients in the present series were febrile at some time during the course of their illness, and nine patients had temperature of 102° F or above. Febrile episodes were mentioned in 34% to 100% of reported cases[14, 24, 41], but were usually described as mild[24, 87]. In view of the more marked temperature response of children to any disease process, this finding is not unexpected here.

Lymphadenopathy was present in all 4 cases, though only 4 of the patients complained of lymph-node tenderness. Enlargement of the nodes occurred in 88% to 100% of the reported cases[18, 21, 88-90], though cases have been reported in which lymphadenopathy was absent[48, 51, 61, 83, 91, 92]. Posterior cervical lymphadenopathy has been noted as especially characteristic of this disease[15, 92].

Pharyngeal inflammation and tonsillar enlargement were common findings, and sore throat was a frequent complaint[18, 24, 41, 86, 88]. The appearance of the pharynx and tonsils ranged from inflammation to formation of pseudomembrane mimicking diphtheria or peritonsillar abscess[15, 16]. Membranous tonsillitis, described as diphtheria-like, was observed in Case 7. In Case 10, exudative tonsillitis was noted. Palatal enanthema has been noted as a useful diagnostic sign during the early stage of the disease[93, 94], though it is by no means specific.

Two of the patients in the present series had edema of the eyelid on admission—a useful diagnostic sign during the early stage[24, 43]. As many as 60% of Hoagland's patients were found to have periorbital edema. Other ocular manifestations were rare[11], and none were encountered in the present series.

Eight patients in this series had definite splenomegaly, while two others evidenced tenderness to palpation in the left upper quadrant of the abdomen. Seven patients had palpable livers; in two the liver was significantly enlarged—5 and 7.5 cm below the right costal margin respectively. Jaundice was not observed, and no liver function studies were performed.

Splenomegaly was reported in 26% to 66% of the cases in the literature[18, 20, 21, 88, 89]. Tenderness of the splenic area was seen occasionally[89], and spontaneous rupture of the spleen was rare[44, 95-98].

The incidence of hepatomegaly observed in the present series (50%) was high as compared with a reported incidence of 5.5% to 35% in other series[20, 86, 88, 89]. Leibowitz[18], however, reported palpable livers in 14 of his 25 patients.

Leibowitz encountered jaundice in 28% of his patients, but found the average incidence of this sign in a large collection of cases from the literature to be only 4.9%. In other reports the incidence ranged from 3% to 11%. The jaundice of infectious mononucleosis is usually mild and transient[18, 100], although hyperbilirubinemia may be present as long as six months after the onset of illness[18, 101].

A recent review of the literature indicated that the liver may often be involved in the disease process without resultant jaundice. A high percentage of the patients were reported to have impaired liver function as gauged by the cephalin flocculation test, thymol turbidity test, and bromsulphalein retention studies[18, 20, 101, 102]. Composite studies indicated that approximately two thirds to three fourths of the patients had hepatitis[76, 100, 101, 144]. Hsia[103], in studying a group of children with proved or suspected infectious mononucleosis, found that the results of liver function studies correlated well with the heterophile antibody titers. Although these tests are not specific, they may be helpful in the diagnosis.

Other signs and symptoms were anorexia, malaise and headache, both in the present series and in the reported cases[24, 86, 88, 89]. Skin rash was seen occasionally. Myalgia and arthralgia were occasionally encountered, but true involvement of the joints was rare[24]. Joint pain was present in Case 11 of the present series.

Headache was the symptom of central nervous system involvement most commonly encountered in this series. Patient 11 complained of visual hallucinations prior to admission, but no objective abnormality was found on physical examination. No meningeal signs were seen, and the cerebrospinal fluid was not examined.

Reports of infectious mononucleosis with central nervous system complications are not uncommon. The various involvements are listed in Table 2. These complications were thought to be rare in children[78], but a review of the 112 cases reported showed that 27 of the total number of patients exhibited neurologic involvement, and that this was the most common complication of the disease in children. It has been observed that patients having primary involvement of the central nervous system associated with infectious mononucleosis often do not manifest the typical signs and symptoms of the disease[41, 51, 61, 72, 78]. Silver[74] pointed out the wide variation in the time that the neurologic manifestations appeared. The differential diagnosis of aseptic meningitis due to infectious mononucleosis from that due to other causes may be difficult if the strict diagnostic crieteria of infectious mononucleosis are not used[51, 61].

Table 2
List of Reported Complications of Infectious Mononucleosis
(Literature review [52, 75])

1. Neurologic complications (36, 16, 51, 59, 78, 91, 104)
   - Meningitis
   - Encephalitis
   - Guillian-Barré syndrome
   - Peripheral neuritis
   - Bell's palsy
2. Hematologic complications (44, 60, 63, 96, 97, 105, 106)
   - Hemolytic anemia
   - Thrombocytopenia purpura
   - Spontaneous rupture of the spleen
   - Splenic necrosis
3. Pulmonary complications (66, 70, 92, 107)
   - Pleural effusions
   - Bronchopneumonia
   - Atypical pneumonia
   - Airway obstruction
4. Cardiac complications (52, 108)
   - Myocarditis
   - Pericarditis
   - Conduction defect
5. Gastrointestinal complications (99, 100, 101, 103, 109, 110)
   - Hepatitis
   - Cirrhosis
   - Pancreatitis
6. Ocular complications (43, 45, 56, 65, 73, 111)
   - Conjunctivitis
   - Retinal edema or hemorrhage
   - Retrobulbar neuritis
   - Extraocular muscle palsy
   - Dacryoadenitis
7. Skin complications (69, 112)
   - Herpetic stomatitis
8. Renal complications (75, 113)
   - Hematuria
   - Renal failure
9. Miscellaneous
   - Nephrotic syndrome (142)
   - Anaphylactic Shock (112)
   - Penile ulceration (113)
   - Orchitis (143)

The various complications of mononucleosis that have been reported in the literature are listed in Table 2. In the presently reported 14 cases, no complication was encountered except in patient 4, who was readmitted to the hospital with fever and prostration 23 days after being discharged. The liver and spleen were still palpable on

the second admission. Mild anemia was noted (hemoglobin, 9.5 gm/100 ml), and she was given a transfusion of whole blood. An exacerbation of infectious mononucleosis was suggested. A detailed study of the anemia was not made.

Hematologic complications are the second most common category in the reviewed cases of infectious mononucleosis. Other complications were rarely seen in children.

Summary: The clinical manifestations of infectious mononucleosis in the group of 14 children reviewed here were similar to those reported elsewhere, but the disease did not appear to be protean when critical diagnostic criteria were used. The complications of the disease appear to be less common in children than in the adult population.

Hematologic Characteristics

The hematologic characteristics of the 14 cases in the present series are listed in Table 1. The peak white blood cell count ranged from 6,000 to 22,400 per cubic millimeter. Leukopenia was observed in Case 9 prior to admission. With the exception of Case 5, all the patients exhibited absolute or relative lymphocytosis and atypical lymphocytes. Peak lymphocyte counts ranged from 48% to 85% of the total blood count. Quantitative studies of the atypical lymphocytes were not available in all cases. Eosinophilia of 8.5% was observed in Case 2, and a mild increase of 3% to 4% was observed in three other cases. Thrombocytopenia was not encountered. Mild anemia was present in Case 4.

The recent review of infectious mononucleosis by Hoagland[24] outlines the minimal hematologic requirements for the diagnosis as follows: (1) lymphocytes must constitute more than 50% of the white cell count; (2) "atypical" lymphocytes must be present; (3) both the above findings must persist for at least ten days.

According to Bender[144], the presence of atypical lymphocytes is almost pathognomonic. The Downey cells, more commonly of type I and type II, can be easily identified, especially during the early stage of the disease. It was Bender's opinion that at least 20% of the lymphocytes should be atypical, or the absolute atypical lymphocyte count should be 1400 per cubic millimeter or more to insure the diagnosis. In his series of 200 cases, an average of 41.3% atypical lymphocytes was encountered.

The total leukocyte count may be within normal limits or slightly increased[24, 87]. Extreme leukoyctosis has been reported in infectious mononucleosis[48, 79], but is a rare phenomonon. Leukopenia may be present during the early stage of the disease[16, 18, 115], but does not occur uniformly. The neutrophil count may be within normal limits during the early stage, but is usually low. In recent years, because of the emphasis on an increase in heterophile antibodies as a diagnostic criteria, cases without the characteristic hematologic picture have been seen more commonly[51, 56].

In Case 5 of the present series, neither lymphocytosis nor atypical lymphocytes were present during the patient's six days' hospital stay. The diagnosis of infectious mononucleosis could not be made without hesitation, although the possibility could not be ruled out because of the heterophile antibody titer of 1:112 and the clinical manifestations. Unfortunately no absorption study was available. The only blood count in this case was done two days after the onset of illness. Lack of repeated blood counts made it impossible to rule out the late appearance of atypical lymphocytes.

The characteristic lymphocytosis is most commonly observed during the second and third week of illness. Leibowitz[18] reported the first appearance of these cells as early as the first day and as late as the twenty-first day after the onset of symptoms. In 70% of Hoagland's patients lymphocytosis was found on the first blood count, and in 80% occurred during the first week.

The duration of atypical lymphocytosis ranged from less than two weeks in rare instances to as long as 16 weeks in others[87, 88]. Hobsen[88] showed that after six weeks from onset only 50% of the patients still had atypical lymphocytes. It is speculated that the rise of heterophile antibody titer may be correlated with the number of atypical mononuclear cells present in the peripheral blood, but actual proof is lacking[54]. Stevens[116] concluded that apparently there is no correlation between the time of appearance

of the atypical lymphocytes and the morbidity of the disease.

The specificity of atypical lymphocytes for the diagnosis of infectious mononucleosis is questionable. Cases in which these cells were absent have been reported[51, 117], and commonly in these cases, central nervous system involvement was manifested[23] in the absence of the typical symptoms and signs of infectious mononucleosis. Gachet, who held that the disease is common in children, found that 15-32 cases (47%) lacked this sign, although lymphocytosis and elevated heterophile antibody titers were observed. Litwin pointed out that Downey cells, which in high numbers are most commonly associated with infectious mononucleosis, also appear in such diseases as acute hepatitis, viral pneumonia, herpes zoster, herpes simplex, and roseola infantum. It was his opinion that the presence of "virocytes" is only an indication of viral disease. The presence of lymphocytes in other conditions such as brucellosis[33], toxoplasmosis[118], para-amino salicylic acid sensitivity[20], and sensitivity to Dilantin[119] have been reported.

Summary: The hematologic picture of infectious mononucleosis in children, both in the cases reported in the literature and in the present series, did not differ significantly from that of the older age group. It must be stressed that lymphocytosis due to diverse viral diseases is much more common in the pediatric age group than in adults. Diagnosis either by the presence of atypical lymphocytes alone or by the rise of heterophile antibody titer alone may have contributed to the reported high incidence of the disease in children.

Serologic Findings

The heterophile antibody titers of sera were determined in all 14 cases. Results of the determinations are listed in Table 3. An anti-sheep red cell agglutinin titer of 1:80 or higher was found in all cases except one. A titer of 1:448 or higher was observed during the course of illness in only 3 patients. Unfortunately, follow-up studies were not complete and differential absorption studies were not performed in all cases. Ten absorption tests on 7 patients were determined. A guinea pig kidney absorption titer of 1:14 or higher was observed in all cases tested except Case 10. The presence of heterophile antibodies of the Forssman type in this case casts doubt on the diagnosis, although the clinical and hematologic findings were consistent. The highest antibody titer after guinea pig kidney tissue absorption was 1:56. Case 12 had an anti-sheep erythrocyte agglutinin titer of 1:3584, but absorption studies were not performed in this case.

"False positive" serologic tests for syphilis were obtained in two of the children. Other serologic studies including febrile agglutinations (typhoid, etc.), the Weil-Felix test, complement fixation test for Rocky Mountain spotted fever, and Brucella agglutinations were done in a few cases, but the results were negative.

Serologic characteristics

Heterophile antibodies are those with the ability to react with antigens that are apparently unrelated to those that stimulated their production. Such antibodies were first described by Forssman[119] in 1911. It is now known that heterophile antigens are widely distributed among the animal species such as the guinea pig, horse, cat and dog, as well as many of the bacteria and viruses[90, 87, 119, 122]. Heterophile antibodies are known to be present in the sera of some normal persons, of patients with serum sickness[11], infectious mononucleosis[8], and other infectious or neoplastic diseases[33, 121, 123].

In 1932 Paul and Bonnell first noticed the elevated titer of agglutinins and hemolysins against sheep erythrocytes in the sera of patients having infectious mononucleosis. This was the basis for the presumptive test of heterophile antibody titer as a diagnostic aid in this disease. The Forssman antibodies are characterized by their ability to react with sheep erythrocytes as well as with the heterophilic antigenic substances in the guinea pig kidney tissue[124], but not with those of beef erythrocytes. The heterophile antibodies of serum sickness and of certain bacterial or viral infections are of this type. The heterophile antibodies of infectious mononucleosis, on the other hand, are able to react with antigenic substances of the beef erythrocytes but not with those of the guinea pig kidney tissue, and therefore are

Table 3

Minimal Diagnostic Titer for Infectious Mononucleosis and Percentage of Seropositive Cases of Infectious Mononucleosis

Author	Heterophile Antibody Titer	Percent of Seropositive Cases
Bender (11)	1:56	100
Bennett (99	1:112	91
Bennike (22)	1:32	68
Bernstein (15)	1:64	92
Bunnell (140)	1:64	
Creaturo (37)		53
Davidsohn (12)	1:28 with GPK abs.*	
	1:320 without GPK abs.	
Gachet (23)	1:64	100
Geraghty (16)	1.160	90
Goldman (133)	1:80	98
Hoagland (17)	1:56 with GPK 1:14	100
Hobsen (88)	1:80 with GPK abs.	Group 1 - 100
		Group 2 - 0
Hsia (103)	1:56	84
Kaufman (38)	1:24 with abs. studies	75
Leibowitz (18)	1:56 with GPK abs.	100
	1:1792 without GPK abs.	
Lumino (39)	1:64	64
Markham (67)	1:40 with abs. studies	100
Nelson (101)	1:224	100
Niederman (46)	1:80 unabsorbed or	
	1:10 absorbed	79
Paige (41)	1:32	76
Read (89)	1:112	100
Schultz (20)	1:56	84
Stevens (21)	1:224	91
Strom (27)		50
Tidy (25)		90

*Guinea pig kidney absorption test

not of the Forssman type. The differential absorption tests were introduced by Bailey[9], Davidsohn[11, 12], and Stuart[28], [125].

Although the serologic characteristics of infectious mononucleosis are considered typical of this disease, the degree of emphasis on this test as a diagnostic criteria varies. The reported incidence of significant titers of heterophile antibodies in patients with the disease has ranged from 15% to 199% of the cases (Table 3). Leibowitz[126] compiled 1,643 cases from the literature in 1953 and totaled an average of 83% seropositive cases. In reviewing the literature, it becomes clear that many factors contribute to the wide variations of heterophile titers.

There is no uniform technique for determing heterophile antibody titers[12, 28, 125, 127]. Overnight refrigeration, centrifugation of the samples, or variation of the sheep erythrocyte concentrations may tend to alter the results[127-129]. This may explain many reported "false positive" heterophile titers in conditions other than infectious mononucleosis.

Failure to perform the agglutination test often enough during the course of illness may account for many cases of "seronegative" infectious mononucleosis. The rise in heterophile antibody titers occurs most commonly during the first three weeks of illness, in most instances becoming positive during the second or third week[16, 18]. Earlier occurrence of a significant titer has been reported[38], and rises as late as 7 to 12 weeks after the onset of illness are on record[13, 130]. In the present series the patient involved in Case 5 had a heterophile titer of 1:112 on the second day of illness, while in Case 10

the latest negative heterophile antibody titer was obtained eight days after the onset of symptoms.

The persistence of heterophile antibodies in infectious mononucleosis varies from a few days to as long as ten months[12, 18, 81]. In general the titer remained elevated for two to six months. Averages of 78.6 and 119 days were reported by Leibowitz[18] and Davidsohn[12] respectively. The elevations may be as transient as five days.

Reports of cases lacking absorption studies are numerous. "False-positive" heterophile titers in diseases other than infectious mononucleosis reported without one or both absorption studies are likewise common. Bender[87] believes that the absorption studies are not essential if the presumptive test gives a titer of 1:56 and the clinical and hematologic pictures are typical of infectious mononucleosis. Leibowitz stated that only when the heterophile titer by the presumptive test is 1:1792 or higher should the diagnosis be assumed without absorption studies.

Authorities vary as to the emphasis on serology in the diagnosis of infectious mononucleosis (Table 3). Markham[67] reviewed a series of cases in the literature and found that in only one of every ten suspected cases was the clinical diagnosis confirmed by serologic studies.

Results of heterophile agglutination tests may be "falsely" positive in diseases other than infectious mononucleosis. Schultz[90] reported titers of 1:56 or above in patients with Hodgkin's disease, agranulocytosis, lymphatic, monocytic and myelogenous leukemia, polycythemia, sarcoma other than Hodgkin's disease, and tuberculosis. No titer above 1:448 was seen except in patients with infectious mononucleosis. Absorption studies were not discussed.

Feldman's[131] case of lymphatic leukemia was somewhat unusual in that the heterophile antibody titer of 1:1024 with characteristic absorption for infectious mononucleosis was actually observed. Other investigators[122, 132, 133] also pointed out the occasional higher titer of heterophile antibodies in patients with neoplastic diseases, but described these antibodies as resembling those of the Forssman type. Zarofenetis, in studying a case of myelogenous leukemia, first noticed the Forssman-like behavior of cold agglutinins for sheep erythrocytes as a source of interference for heterophile antibody titers[135, 136].

Infections of bacterial origin have also been associated with elevated heterophile antibody titers[47, 121]. As a rule, these are antibodies of the Forssman type. Spink[74] pointed out that in the differential diagnosis of brucellosis and infectious mononucleosis, the differential absorption tests are especially important since both diseases may cause a rise in heterophile antibody titers and the presence of atypical lymphocytes.

Markham[67] pointed out that particular attention should be paid to the cases in which unabsorbed titer for sheep agglutinins is between 1:100 and 1:1500. The specificity of the antibodies can only be identified by the use of absorption studies.

Heterophile antibody titers in children

It is speculated that heterophile titers of children with infectious mononucleosis are lower than those of adults[145]. Definite studies documenting this theory are not easily found. Hobson[88] analyzed a series of patients, dividing them into two groups according to the results of the Paul-Bunnell test and the differential absorption studies. Group 1 includes the patients showing a rise in heterophile antibody titer; the peak age incidence in this group was between 20 and 29 years. Group 2 comprise the patients that were seronegative; the peak age incidence in this group was between birth and nine years. It was pointed out that the infectivity of the disease was higher in the latter group. Bernstein[15], in 1940, reported 5 cases of seronegative infectious mononucleosis among his 64 cases; 4 of these 5 were 11 years of age or younger. In Benike's[10] survey of 166 cases, the overall heterophile titer was positive in 63.5% of the cases. However, only 32% of the patients under 10 years of age had a significant titer. In Kaufman's series[71], 4 of the 18 children did not have a significant rise in antibody titer, and in 10 the titer was negative after guinea pig absorption. Similar results were reported by Paige[41].

Seronegative cases of infectious mononucleosis in adults as well as children, have been reported[76, 137], and the term "pseudomononucleosis" has been used in recent years[138, 139]. Kimbrough[138] described a disease entity which clinically resembles infectious mononucleosis but in which atypical lymphocytes were not commonly seen. Heterophile antibody titers were elevated in 232 of the 250 cases, but of the 80 cases in which absorption studies were performed, only 8 had a positive reaction. Vahlquist found in his series that no patients under 5 years of age had a positive heterophile antibody titer, while in the age groups of 5 to 9 and 10 to 14 years, 8.8% and 26.4% respectively gave positive titers [107]. On the other hand, markedly increased heterophile antibody titers in very young infants or children with infectious mononucleosis were found in the literature[18, 51, 57].

Review of the literature between 1950-1960 revealed 111 cases of infectious mononucleosis in children in 35 reports. Out of this group, no heterophile studies were done in four cases, and in two cases tests were reported as "positive." The range of the heterophile antibody titers was from 0 to 1:7168. Only eight patients (7.2%) had a titer of 1:1792 or higher. Fifty-two cases, or close to 50%, had a titer of 1:160 or below. In five cases the heterophile titer was reported as negative. In general, the titers of heterophile antibodies in adult patients with infectious mononucleosis are higher than these reviewed cases. In Leibowitz's 25 cases, none of the patients had a titer lower than 1:448. Others reported titers of 1:224 or higher in more than 70% of the cases[21, 99].

In the present series of 14 cases, although there were no long-term follow-up studies, the available data also showed a rather low titer in most of the cases (1:160 or below in nine cases).

A possible explanation for this lower titer in children has been postulated by Vahlquist[107]: (1) The incidence of infectious mononucleosis in children is actually low; or (2) the lower titer may be due to an age specific lack of ability to form heterophile antibodies.

One may raise the question of whether there are actually two types of infectious mononucleosis, the adult and the juvenile, or the seropositive and the seronegative types. Recent developments along this line seem to follow two general opinions:

1. The seronegative and the seropositive types are not one but actually two separate disease entities. Hobson[88] and Shubert[139] seem to favor this view. This may explain the fact that when the diagnostic criteria are critically observed, infectious mononucleosis appears to be rare in children.

2. The seronegative and the seropositive types of infectious mononucleosis are one disease with different phases. Evans[80] suggested that the primary phase of the disease is of an abortive nature, occurs commonly in children, with a milder clinical course and an epidemic tendency, and is rarely marked by an elevated heterophile antibody titer. The intermediate phase of this disease is described as viremic, with common symptoms of rashes and a heterophile antibody titer that is low or not yet detectable. Finally, the third phase, manifested by the clinical, hematologic and serologic picture of the adult type of infectious mononucleosis was thought to be due to the tissue reaction on an immune basis.

The latter hypothesis is an attractive one. It may explain the rarity of the sporadic form of the disease and the milder antibody response seen in children. Many of the complications, such as hemolytic anemia and thrombocytopenic purpura, also tend to incriminate an immune response of the body.

Summary

Fourteen cases of infectious mononucleosis in children under 14 years of age are reviewed. The clinical, hematologic, and serologic characteristics of these cases are briefly analyzed. The literature reveals controversial opinions concerning this disease. Infectious mononucleosis seems to be rare in the pediatric age group if the diagnostic criteria are rigidly observed. The proposed pathogenesis of the disease is briefly discussed.

(References supplied on request)

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Recognition and Diagnosis of Strabismus in Infants

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The opportunity to save sight and straighten an infant's eyes comes to the physician who first sees the child with strabismus, recognizes the condition, and either immediately starts treatment or refers the patient to a specialist for treatment with eye drops, glasses, or surgery[1]. Therefore, owing to the great frequency of strabismus —about 1 case in 50—each doctor will use every possible method to uncover the condition. Constant strabismus, even during the first six months of life, must be treated immediately. Irreparable harm often results when treatment is delayed.

History

A careful study of the family tree will often reveal strabismus. This survey must include not only great grandparents, grandparents, parents, and siblings, but cousins, uncles, and aunts. Brown's law of anticipation often applies in hereditary strabismus. In other words, the strabismus appears earlier and is more severe when it is hereditary.

Diagnosis

A constant monocular strabismus indicates the need for a complete eye examination to rule out retinoblastoma, toxoplasmosis, congenital cataract, corneal scars, congenital atrophy, and unequal refractive errors[2]. Monocular strabismus usually indicates amblyopia (undeveloped vision) in the deviating eye, whereas alternating strabismus is usually associated with equal vision.

As all visual patterns are formed by the age of six years, a cosmetic rather than a fusional result is expected in esotropia (inward deviation) after this age; however, in exotropia (outward deviation) a fusional result is possible after the age of six.

Eyes that are more crossed for near than distant vision usually indicate accommodative esotropia, and will often be helped by industrial thickness safety glasses for the farsightedness. In such cases the glasses should be worn during all waking hours.

After obtaining the history, the doctor observes the normal position of the child's head as he looks at a light or a toy at a distance of 3 feet and again at 20 feet. If the head is turned horizontally in a paralytic squint, it is usually the lateral muscles that are involved.

The bony orbits are examined for similarity of size and configuration. The sides of the face may not be symmetrical. If this is the case, a history of trauma or hereditary anomalies or inborn metabolic errors is sought[3].

Esotropia: Illness, fatigue, and anger make an intermittent esotropia manifest. Late in the afternoon, because of fatigue, the farsightedness will cause the fusion to break and the eyes to cross. Of course, when there is excessive farsightedness, glasses may help the esotropia and straighten the eye if worn during all the waking hours. Corrective glasses for myopia do not help esotropia.

Exotropia: A child often shuts one eye when an eye turns outward. This finding can be reinforced by asking the child to look at a bright corner of the window. In myopes, glasses usually do not help overcome the exotropia. If the child has no myopia or is farsighted, immediate operation on the involved eye muscles is necessary.

General developments: Many slowly developing children have eye-muscle problems. Spastics often have overactive convergence. A few children who are slow in walking, talking, crawling, and climbing have an associated extraocular muscle imbalance.

Birth trauma can contribute to facial anomalies as well as intracranial hemorrhages of the nuclei of the third, fourth, and sixth

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nerves, leading to strabismus and ptosis[4]. Anoxia is said to be the cause of bilateral rectus palsy, known as the Moebius syndrome.

In cases of monocular squint, the visual acuity is estimated by one of the various methods for infants described previously[5].

Pseudo-strabismus: False strabismus, or pseudo-strabismus, is found in infants with (1) a narrow interpupillary space, (2) a wide flat nasal bridge, and (3) wide epicanthal folds.

Jampolsky[6] has popularized the prism test in which a 4-diopter prism is placed, base out, before the right eye while the infant looks at a toy at a distance of 3 feet and then 20 feet. If the left eye moves and maintains the position, strabismus is present[6]. Then the prism is placed before the left eye, base out, and the test repeated.

The cover-uncover test: The infant's head is steadied by the doctor or parent while one eye is occluded. After counting ten, the examiner moves the cover to the other eye. If the eye that is uncovered moves inward toward the nose, the child has exotropia. This test is performed with the baby facing the doctor at a distance of 3 feet, and looking at a large moving, sound-making toy placed at a distance of 20 feet.

Treatment

As soon as strabismus is recognized or suspected from the history, treatment should begin. In monocular cases, a 2 per cent solution of homatropine should be used in the dominant fixing eye. If the infant is farsighted, industrial-thickness safety glasses should be prescribed for esotropia. If he is not farsighted, surgery is indicated. With alternating strabismus and farsightedness, glasses should be worn constantly. In cases of exotropia (eyes that turn out), glasses are prescribed for the nearsighted infants. In farsighted patients and in all others, surgery is indicated immediately, since in wall-eyed infants strabismus will continue to increase without it.

Summary

Early recognition and immediate treatment of strabismus will help to prevent amblyopia, as well as straighten the eyes cosmetically and functionally.

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The full-time teacher has become more and more nearly the only one who can keep up with the constant flow of new knowledge. I know a good many such full-time teachers who are not only candid but emphatic in saying that they are not able to keep up. The pressure increases for the professor to delegate, compartmentalize, and thus to contribute to the more serious faults of specialization. As a reaction, there is a great deal of talk about integration, but it seems frequently asked of the student but never exemplified in the person of a teacher—another factor in the students' trend toward early specialization.—Alan Gregg in *Challenges to Contemporary Medicine*, Columbia University Press, 1956, pp. 72-73.


Nature, it has been observed, is the original promoter–for constantly and ingeniously she is expanding her creations.
INFLUENCE...
As a respected doctor, the ideas you express will take root in the minds of many. As an active supporter of Blue Shield you can, if you will, do more than anyone else to further the cause of this voluntary, doctor-guided program of medical care prepayment in your community. One doctor writes: "A team of Blue Shield Plans and cooperating physicians cannot be matched by any other program aimed at the same purpose."
BLUE SHIELD
HOSPITAL SAVING ASSOCIATION
CHAPEL HILL, NORTH CAROLINA

The New Enlarged Program of

DISABILITY INSURANCE

AVAILABLE TO MEMBERS OF

The Medical Society of the State of North Carolina

DESIGNED TO MEET PRESENT DAY NEEDS

PLANS UP TO

- $250.00 WEEKLY DISABILITY INCOME BENEFITS ($1,080.00 monthly)
- $20.00 PER DAY EXTRA HOSPITAL BENEFIT (Optional)

PLAN L-7 (Basic)

SEMI-ANNUAL PREMIUMS

Lifetime Accident and 7 years Sickness

Weekly Benefits	Dismemberment Benefits	Principal Sum For Accidental Death	Premium Age 40 and Over	†Reduced Premium To Age 40
$250.00	Up to $50,000.00	$5,000.00	$244.50	$183.50
$200.00	Up to $40,000.00	$5,000.00	$196.50	$147.50
$150.00	Up to $30,000.00	$5,000.00	$148.50	$111.50
$100.00	Up to $20,000.00	$5,000.00	$100.50	$ 75.50

PLAN L-65 (Long Term)

SEMI-ANNUAL PREMIUMS

Lifetime Accident and For Sickness, from Inception of Disability to Your Attainment of Age 65

Weekly Benefits	Dismemberment Benefits	Principal Sum For Accidental Death	Premium Age 40 and Over	†Reduced Premium To Age 40
$250.00	Up to $50,000.00	$5,000.00	$292.00	$219.25
$200.00	Up to $40,000.00	$5,000.00	$234.50	$176.00
$150.00	Up to $30,000.00	$5,000.00	$177.00	$133.00
$100.00	Up to $20,000.00	$5,000.00	$119.50	$ 89.75

The premiums for Plan L-65 will be reduced to the same premium as for Plan L-7 at age 58.

Note: The above rates **do not** increase at age 50, or even at age 60!

†On attaining age 40, age 40 rates apply on renewal.

J. L. CRUMPTON,
State Mgr.

Professional Group Disability Division
COMMERCIAL INSURANCE COMPANY OF NEWARK, N. J.
Box 147, Durham, N. C.
J. Slade Crumpton, Field Representative

If more information is needed or help desired in completing your enrollment, please call us collect:
Area Code 919—Phone 682-5497.

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Founding Editor (1940-1963)

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MARCH, 1965

MAY MEETING IN CHARLOTTE

In a year of considerable socioeconomic activity in medicine, to say nothing of scientific change, the State Society gathers in Charlotte to gain information and exchange ideas. A constitutional amendment comes up for a vote, and many other items of great importance will be brought before the delegates. Several previous editorials and messages from President Raiford have urged members to take an interest in the affairs of the Society, and to give the Society the benefit of their views. We encourage our readers to attend the annual meeting, and to speak with their delegates about the issues to come before the group. Each delegation is aware of the matters to be discussed, and most of them have been presented to the membership through one medium or another. We urge you to give up muttering in your beard, if you have one, in favor of speaking to your delegation and to your fellow members in Charlotte.

* * *

SPARGANOSIS

North Carolina's history has been exemplified by the oft-quoted observation that the state represents a vale of humility between two mountains of conceit. The article by Dudley and Pool on sparganosis gives objective evidence that we have at least bested South Carolina in the matter of worms beneath the skin. Perhaps our neighbors in the Palmetto State have them and don't know how bad off they are; it seems reasonably certain that they will not hotly contest this distinction.

* * *

ABNORMAL LYMPHOCYTES IN YOUNG AND OLDER

The lymphocytes normally present in children are somewhat less uniform in their appearance than those of adults. According to current concepts, this is probably a reflection of their activity in developing immunity to life's various infections. These "atypical" lymphocytes are all too often interpreted as evidence of infectious mononucleosis when the child has an illness which fits his physician's concept of that disease. The best safeguard against uncritical acceptance of such a diagnosis is familiarity with the variability of lymphocytes in the blood of normal children, coupled with the realization that a firm diagnosis of infectious mononucleosis depends on several factors. These factors are a clinical illness of a fairly uniform pattern, absolute lymphocytosis with most cells of the "virocyte" type, and sheep cell agglutinins of the infectious mononucleosis type in the blood. Since human blood may contain at least three different types of sheep cell agglutinins, a plain heterophile test is not adequate, and differential absorptions should be carried out.

Infectious mononucelosis being primarily a disease of young adults, yet diagnosed often and erroneously in children, Dr. King's paper in this issue should be of interest to

all physicians who see acutely ill patients in these age groups. Since her emphasis is upon infectious mononucleosis in children, it is not amiss to recall that infectious mononucleosis is most unusual beyond the age of 35. Past that age most people with an *absolute* lymphocytosis have lymphocytic leukemia. Perhaps the most common diagnostic error, however, is mistaking relative lymphocytosis for absolute lymphocytosis. Since viral infections are commonly associated with relative lymphocytosis and atypical lymphocytes, they provide an invitation to mistakenly diagnose leukemia as well as infectious mononucleosis in the older person.

* * *

PHARMACIST AND PHYSICIAN

The traditional association between pharmacists and physicians is all too often taken for granted, and there is much ignorance on both sides about the other's activities, the physicians probably being the most neglectful. Mr. McAllister's paper in this issue* of the JOURNAL should help dispel some of this ignorance. One wonders, for example, how many physicians realize that modern pharmaceutical education lasts five years, and in this state must be supplemented by a year of "internship."

In the long period of years when the pharmacist compounded many of his own medicines, and even gathered the necessary herbs, physicians knew the pharamacists more intimately, for their individual skills were often the only guarantee that potent medications were being used. The modern pharmacist does not have this responsibility in most instances, but he has acquired many others which are equally important. The nature of these responsibilities, his preparation for assuming them, and the legal structure in which he operates are all of importance to physicians and their patients.

Mr. McAllister is rightly concerned that neglect of their common interests by physician and pharmacist may lead to greater legal regulation of both professions. An example of the genuine cause for his concern, although not a legal responsibility of his Board, is the Durham-Humphrey amendment to the Pure Food and Drug Act. As most physicians know, this amendment prohibits the pharmacist from refilling any prescription unless the physician re-orders it. The amendment was enacted because of laxity by both groups in casually refilling prescriptions for such drugs as barbiturates and amphetamines. Still, with the law on the books, a pharmacist cannot legally refill a prescription for digitalis which he knows must be continued. When and if he does refill such a prescription without an order, he is being led down the primrose path by a neglectful physician, who may well resent being called to give permission for what is obvious to both.

With so many common concerns, we are grateful to Mr. McAllister for supplying details of the operation of the pharmaceutical profession in North Carolina. We hope that at least a few unfortunate situations can thereby be avoided.

* * *

NO MAN'S MEAT

Our cave-dwelling ancestors had little opportunity to poison themselves, not having most of our poisons and being without kitchen and bathroom cabinets in which to store them. It now seems well established that dealing with accidental poisoning is here to stay as an obligation of the physician, and for over a decade Dr. Jay Arena has kept this obligation before the physicians of this and other states. In this issue* of the JOURNAL he announces the development of what he calls a "Master Unit" in the Duke Poison Control Center, chiefly an intensification of its teaching efforts.

In addition to its role in practice, the Duke Poison Control Center has been active in teaching for many years. Dr. Arena's columns in this JOURNAL have been a very popular feature, and he has spoken on the subject to many of the county medical societies of our state. Increased activity in these fields is both needed and welcome, and the JOURNAL is pleased to call attention to the announcement.

*This and the following editorial were intended for the February issue but were crowded out by the report of the Midwinter Executive Council Meeting and the proposed constitutional amendments.

President's Page

A UTILIZATION COMMITTEE

During the past few years there has arisen a great hue and cry regarding over-utilization and abuse of hospital insurance. This has become so vital that one encounters it in almost every gathering where the economics of medical care is discussed. In fact, a recent issue of *Medical Economics* was devoted almost entirely to its scope, its attempted control, and the results. That it is a problem of vital concern is demonstrated by the frequent necessity of raising insurance premiums and the occasional embarrassing cancellation of insurance contracts.

In many areas attempts at curbing this abuse have been made by the creation of *utilization committtees,* usually at the level of the hospital staff, sometimes in county medical societies. Some of these have succeeded remarkably well; others have done no more than create antagonism between staff members. Obviously, in order to create some effective deterrent to the practice, a uniform approach is necessary. This can be done only after a critical evaluation of the responsibilities of all parties concerned with the use of hospital insurance. These include roughly four categories—the patient, the hospital, the physician, and the insurance companies (and other third parties) responsible for assistance in payment of health expense.

Last year the Executive Council of the Medical Society authorized the activation of a Utilization Committee at the state level for the purpose of attempted control of over-utilization. While it is quite true that physicians bear a large part of this responsibility and have a large stake in its success, adequate control encompasses a multilateral effort and all involved parties should be represented. After reviewing the experiences of other states in respect to utilization committees, their function, structure, modus operandi, and their results, I have therefore appointed a committee of the Medical Society whose activities and purpose can be best described by the statement of function as outlined and approved by the Executive Council:

"(Statement of Structure and Function)"

"The President shall appoint a utilization committee consisting of nine (9) members as follows:

Two (2) members each from

(A) The Blue Shield Committee;

(B) The Committee Liaison to the Insurance Industry;

(C) The Committee on Hospital and Professional Relations;

Three (3) members at large, one of whom shall be chairman.

"The function of this committee shall be to represent the Medical Society in a liaison and advisory capacity to similar committees representing the North Carolina Hospital Association, the North Carolina State Committee of the Health Insurance Council and representatives of state agencies whom the Governor might see fit to designate including the Insurance Commissioner of the State of North Carolina, in studying the problem of over-utilization of health insurance and formulating policies to rectify and prevent abuse in this area.

"It is further recommended that if this committee is found to have a continuing necessary function three years after the date of its activation, it be made a constitutional or standing committee with a designated structure and system of membership rotation."

I am not so naive as to believe that this committee can completely solve the problem. If proper cooperation is obtained not only from other involved parties but from all members of the Society, the following aims may be accomplished:

1) A reasonable unanimity of procedure will be reasonably assured at the county, city, and hospital levels with modifications dictated by local conditions:
2) Moral support and backing will be provided in these areas by state level policies;
3) Those physicians at the local level attempting to implement deterrent action

will be reasonably assured of cooperation from other involved parties.

The Medical Society and its members cannot hope to rectify the situation alone. If we accept and carry out our personal obligations, however, much can be accomplished in preserving the effectiveness of the voluntary health insurance programs and in so doing, helping avert or minimize Federal control.

T. S. Raiford, M.D.

Correspondence

A SIMPLE DEVICE FOR APPLYING LEG TRACTION AT HOME OR IN THE HOSPITAL

To the Editor:

Physicians have long used leg traction of many varieties and weights in an effort to lessen pressure in the intervertebral spaces. The reason for so many different types of apparatus is that none was completely satisfactory, and many using tape on the leg actually created tape burns and blisters while exerting the pull. Most of the devices were so cumbersome that a second person was required to assist in applying them.

There are several requirements of a good traction apparatus.

1. It should exert a pulling force.
2. The amount of force should be easily adjustable.
3. The device should be applicable to patients of various sizes.
4. It should be easily removed and reapplied to allow bathroom privileges.
5. It should be simple and inexpensive to operate.
6. It should not burn or injure the patient's skin.
7. It should be applicable at home as well as in a hospital.

To satisfy all the above requirements, a simple apparatus was devised as follows:

A screen door eyelet hook was screwed into the sole of the patient's shoe at the instep (fig. 1). To this a cord was attached which in turn was run through a dime-store pulley that had been previously suspended from the ceiling (a hall tree at the foot of the bed would do as well). To the other end of the cord a bucket of sand or brick was attached to provide the desired amount of traction (one brick weighs from 4 to 5 pounds).

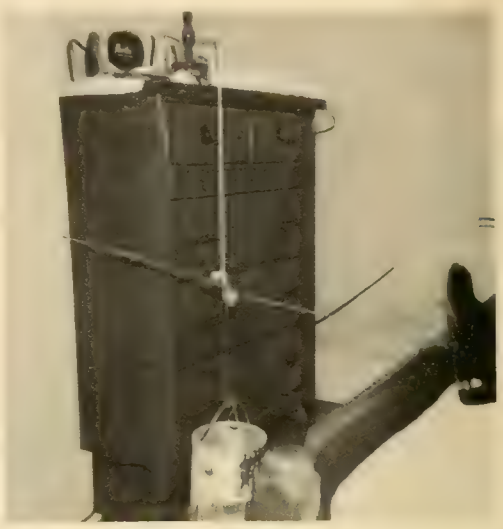


Fig. 1

This device has several advantages. It can be applied or removed by the patient as needed, and it can be used at home just as well as in the hospital. It is assembled from inexpensive and readily available parts; its total cost is less than one dollar. This figure is absurdly small in comparison with the cost of keeping one patient in the hospital to receive traction. Blue Cross tells us that they pay many such claims each year.

Bruce B. Blackmon, M.D.

Buies Creek

Moses H. Cone Memorial Hospital Opens New Wing

On October 24, 1964, the Moses H. Cone Memorial Hospital opened a 22-bed psychiatric wing for the short-term treatment of acute cases with an average stay of two to four weeks.

According to a statement by Dr. Robert L. Garrard, chief of the hospital's psychiatric section, the new unit was half filled the first day, and on at least three occasions since that time "it has been completely filled and patients had to be moved to the Progressive Care unit or discharged, in order to make room for new patients."

"This response shows the great need for providing psychiatric treatment in the community," he added.

Preliminary Program of the
ONE HUNDRED ELEVENTH ANNUAL SESSION OF THE MEDICAL SOCIETY
OF THE STATE OF NORTH CAROLINA
May 1, 2, 3, 4, 5, 1965
Charlotte, North Carolina
Queen Charlotte Hotel and the
Merchandise Mart

SATURDAY, MAY 1, 1965

9:00 A.M.—Executive Council Meeting
(Business of this Session may be continued Sunday morning at 10 o'clock.)
(Queen Charlotte—Chelsea Room)

SUNDAY, MAY 2, 1965

10:00 A.M.—General Registration opens, Booth
(Lobby—Merchandise Mart)
(Society Members, Delegates, Officials, Guests, Technical and Scientific Exhibitors will register in this Area) (Registration Closes at 4:00 P.M.)

2:00 P.M.—First Meeting of the Annual Meeting
THE HOUSE OF DELEGATES of the Medical Society
John C. Reece, M.D., Speaker, presiding
Invocation: Rabbi Israel J. Gerber, Temple Beth El, Charlotte
Welcome: Mayor Stanford Brookshire
City of Charlotte
(Agenda will be available)
(Merchandise Mart—3rd Floor—Room C-331

4:00 P.M.—Registration Desk closes.

5:00 P.M.—Social Hour—University of Virginia School of Medicine Alumni

6:00 P.M.—House of Delegates recesses to Monday, May 3, 1965 (if necessary)

6:00 P.M.—Dinner: University of Virginia School of Medicine Alumni
(Charlotte City Club)
Wives invited and expected.
Charles L. Stuckey, M.D., Charlotte

8:00 P.M.—MEMORIAL SERVICE
Charles H. Pugh, M.D., Chairman, presiding
Choral Presentation
Address: Rev. Elam Davies, Minister
Fourth Presbyterian Church
North Michigan Avenue & Delaware Place
Chicago, Illinois
(First Presbyterian Church—Charlotte)

MONDAY, MAY 3, 1965

8:30 A.M.—Scientific and Technical Exhibits open
(Merchandise Mart—Exhibit Area)

8:30 A.M.—General Registration opens, Booth
(Lobby—Merchandise Mart)
(Society Members, Delegates, Officials, Guests, Technical and Scientific Exhibitors will register in this area.)
(Auxiliary Members will register at the Sheraton-Barringer Hotel)

9:00 A.M.—NORTH CAROLINA BOARD OF MEDICAL EXAMINERS
(Meet for Business and Hearings)
(Queen Charlotte Hotel)

POSTGRADUATE AND AUDIO-VISUAL PROGRAM
John C. Grier, Jr., M.D., Chairman, Pinehurst
(Morning Session—Audio-Visual Room—Merchandise Mart)
Paul McBee Abernethy, Moderator, Burlington

9:00 A.M.—HYPOXIA
Study of the effects of low oxygen tension.
U. S. Air Force film.

9:30 A.M.—MAXILLOFACIAL PROSTHETICS
Origin and present status. Rehabilitation of patients.
Techniques used in preparation and application.

10:00 A.M.—THE SILENT KIDNEY: THE IMPORTANCE OF THE ASCENDING INFECTION.
The relationship between bacteriuria and pyelonephritis. The role of reflux in urinary tract infections.

10:30 A.M.—TETANUS AND ITS PREVENTION
Based on 105 cases of tetanus. The bacteriologic basis; portals of entry; action of toxin produced; prognosis. Use of tetanus toxoid for prevention. A program of universal immunization.

11:00 A.M.—ARTHROPOD-BORNE ENCEPHALITIS—ITS EPIDEMIOLOGY AND CONTROL.
One of the major insect—borne diseases of the country. Signs of encephalitis, diagnosis, treatment, and prevention. Transmission cycle from birds to mosquitoes, to other animals and man.

FIRST GENERAL SESSION

Monday, May 3, 1965

(Main Meeting Room—Merchandise Mart)

8:30 A.M.—Film

9:00 A.M.—Convene Session
Theodore S. Raiford, M.D., President
Invocation: Father Francis J. Tait, Our Lady of the Assumption Church, Charlotte

9:00 A.M.—DIAGNOSIS AND MANAGEMENT OF URINARY TRACT INFECTION
William J. DeMaria, M.D., Dept. of Pediatrics, Duke Hospital, Durham
Janet Fischer, M.D., N. C. Memorial Hospital, Chapel Hill
James F. Glenn, M.D., Professor of Urologic Surgery, Duke University Medical Center, Durham

10:30 A.M.—Break

11:00 A.M.—Address: "CANCER OVER THE PAST PAST 50 YEARS"
Charles S. Cameron, M.D., President
Hahnemann Medical College, Philadelphia, Pa.

11:30 A.M.—Address: "THE METASTASIS OF THE SURGEON"
Herbert D. Adams, M.D.
Boston, Mass.

12:00 Noon—MEDICINE'S RESPONSIBILITY IN THE POPULATION EXPLOSION
H. Curtis Wood, Jr., M.D., Medical Field Consultant, Human Betterment League, Ft. Washington, Pa.

12:30 P.M.—ANNOUNCEMENTS
ADJOURNMENT

ALUMNI LUNCHEONS

Monday, May 3, 1965—1:00 P.M.

Duke University Medical School Alumni Association
(Queen Charlotte—Chelsea Room)
North Carolina Society of Internal Medicine
(Queen Charlotte—Keuster Room)

2:00 P.M.—HOUSE OF DELEGATES OF THE MEDICAL SOCIETY reconvenes
(Merchandise Mart—3rd Floor—Room C-331)

POSTGRADUATE AND AUDIO-VISUAL PROGRAM
John C. Grier, Jr., M.D., Chairman, Pinehurst
Afternoon Session—Audio-Visual Room, Merchandise Mart
John R. Ashe, Jr., M.D., Concord, Moderator

2:00 P.M.—DIURESIS
Physiology of the kidney. Function under several nephropathies, under cardiac insufficiency, under liver cirrhosis. Mechanism of action of important diuretics.

2:30 P.M.—SPACE MEDICAL OPERATIONS
Advancing progress in space medicine

3:00 P.M.—PROJECT GEMINI—MISSION CONCEPT
Medical aspects of space travel. Research in space medicine.
3:30 P.M.—EMOTIONAL FACTORS IN GENERAL PRACTICE
Problems encountered by the general practitioner.
Helping the emotionally disturbed patient.
4:15 P.M.—RESEARCH IN MENTAL ILLNESS
Physiological approach in research in mental illness.
Electrical and chemical stimulation of the brain.
5:00 P.M.—Scientific and Technical Exhibits close.
(Exhibits under supervision of official watchmen)
5:30 P.M.—House of Delegates adjourns Annual Meeting

SECTION ON OBSTETRICS & GYNECOLOGY
Monday, May 3, 1965—2:30 P.M.
(Room #1—Merchandise Mart)
R. Pinkney Rankin, Jr., M.D., Chairman, Charlotte

SYMPOSIUM ON VULVAR DISEASE
DIAGNOSIS AND MANAGEMENT OF VULVAR LESIONS
Roy T. Parker, M.D., Durham
HISTOPATHOLOGY OF COMMON VULVAR LESIONS
Herbert Z. Lund, M.D., Greensboro
DERMATOSES OF VULVA—LOCAL AND SYSTEMIC
Howard P. Steiger, M. D., Charlotte
Panel Discussion (Question & Answer)
Moderator: Roy T. Parker, M.D.
INTERMISSION—(3:30-3:45)
ADOLESCENT GYNECOLOGY—SYMPOSIUM
PSYCHOSOMATIC INTER-RELATIONSHIPS IN ADOLESCENCE
Eleanor B. Easley, M.D., Durham
EVALUATION & MANAGEMENT OF DYSFUNCTIONAL BLEEDING
John H. Monroe, M.D., Winston-Salem
ORGANIC LESIONS ENCOUNTERED IN ADOLESCENCE
Hugh M. Shingleton, M.D., Chapel Hill
Panel Discussion (Question & Answer)
Moderator: John H. Monroe, M.D.

SECTION ON RADIOLOGY
Monday, May 3, 1965—2:30 P.M.
(Room #4—Merchandise Mart)
Simmons I. Patrick, M.D., Chairman, Kinston

THE ROLE OF THE POST FACT CHOLECYSTOGRAM IN GALLBLADDER SERIES
E. B. Spangler, M.D., Greensboro
PERICUTANEOUS CHOLANGIOGRAPHY
Robert J. Reeves, M.D., and M. Paul Capp, M.D., Durham
CINERADIOGRAPHY OF THE URINARY TRACT—A PHYSIOLOGICAL APPROACH
M. Paul Capp, M.D., Durham
RENAL ARTERY ANEURYSMS
William Barry, M.D., Durham

SECTION ON SURGERY
Monday, May 3, 1965—2:30 P.M.
(Main Meeting Room—Merchandise Mart)
J. Ralph Dunn, Jr., M.D., Chairman, Tarboro

MANAGEMENT OF:
THE INJURED PATIENT IN SMALL COMMUNITY HOSPITALS
James S. Mitchener, Jr., M.D., Laurinburg

MASS CASUALTIES
Edwin J. Wells, M.D., Wilmington
ABDOMINAL TRAUMA
Samuel G. Jenkins, Jr., M.D., Elizabeth City
CHEST TRAUMA
Bruce J. Franz, M.D., Asheville
INDICATIONS AND MANAGEMENT OF TRACHEOSTOMY
M. Glenn Morris, Jr., M.D., Greensboro
VASCULAR INJURIES
Gordon M. Carver, Jr., M.D., Durham
INITIAL MANAGEMENT OF LONG BONE FRACTURES
John L. Wooten, M.D., Greenville
MAXILLO-FACIAL INJURIES
Robert J. Bosley, M.D., Wilson
HEAD INJURIES
William R. Pitts, M.D., Charlotte
URINARY TRACT INJURIES
A. Page Harris, M.D., Charlotte
DIAGNOSIS AND MANAGEMENT OF THROMBO-EMBOLISM
David C. Sabiston, Jr., M.D., Durham

SECTION ON INTERNAL MEDICINE

Monday, May 3, 1965—2:30 P.M.

(Room #5—Merchandise Mart)

William B. Young, M.D., Chairman, Wilson

EFFECTS OF ALCOHOL ON THE DIGESTIVE TRACT
John T. Sessions, Jr., M.D., Chapel Hill
NON-TOXIC GOITERS
Ernest H. Yount, M.D., Bowman Gray, Winston-Salem
CORONARY HEART DISEASE
E. Harvey Estes, Jr., M.D., Duke University Medical Center, Durham
ELECTION OF OFFICERS AND OTHER BUSINESS.

SECTION ON PATHOLOGY

Monday, May 3, 1965—2:30 P.M.

(Room #3—Merchandise Mart)

Kenneth M. Brinkhous, M.D., Chairman, Chapel Hill

DIAGNOSTIC TESTS AND INVERSE PROBABILITY
Oscar Kanner, M.D., Veterans Hospital, Durham
EVALUATION OF TRANS-TENTORIAL HERNIATION AS A MECHANISM OF DEATH
Gordon Klintworth, M.D., Duke Medical Center, Durham
CELLULAR MIGRATIONS FROM THE SPLEEN IN THE IMMUNE RESPONSE
Donald C. Cannon, M.D., Univ. of N. C., School of Medicine, Chapel Hill
SPARGANOSIS IN NORTH CAROLINA
Joseph M. S. Dudley, M.D., and Robert S. Pool, M.D., Winston-Salem
THE PERCUTANEOUS RENAL BIOPSY—A CRITICAL ANALYSIS
S. M. Kurtz, M.D., Duke Medical Center, Durham
4:30 P.M.—BUSINESS MEETING

SECTION ON STUDENT AMA CHAPTERS

Monday, May 3, 1965—2:30 P.M.

(Room #2—Merchandise Mart)

E. J. Hocutt, Chairman, UNC School of Medicine, Chapel Hill

PANEL DISCUSSION:
SYMPOSIUM ON THE MEDICAL AND SURGICAL THERAPY OF HYPERTENSION
Moderator: T. Franklin Williams, M.D., Chapel Hill

Panelists: "The Treatment of Medical Hypertension"
Henry Miller, M.D., Bowman Gray, Winston-Salem
"The Treatment of Surgical Hypertension"
James F. Glenn, M.D., Duke University Medical Center, Durham

Scientific Papers presented by students from UNC, Duke and Bowman Gray. Participants to be announced.

Judges: Jesse H. Meredith, M.D., Bowman Gray, Winston-Salem
Luther W. Kelly, Jr., M.D., Charlotte Memorial Hospital, Charlotte
Dan A. Martin, M.D., UNC School of Medicine, Chapel Hill

RECEPTION AND SOCIAL HOUR

Monday Evening, May 3—6:00 P.M.-7:30 P.M.

Sponsored by: Mecklenburg County Medical Society and Medical Society of State of North Carolina

(For Medical Society Members, Scientific and Technical Exhibitors, Medical Students.)

(Queen Charlotte Hotel—Ballroom

6:45 P.M.—Social Hour—Medical College of Virginia Alumni
(Barclay Restaurant)

7:45 P.M.—DINNER—Medical College of Virginia Alumni
(Barclay Restaurant)
R. Douglas Neal, M.D., Charlotte, Local Chairman
ADDRESS: Hunter McGuire, Jr., M.D., Assistant Dean, Medical College of Virginia, Richmond, Va.

SECTION ON STUDENT AMA CHAPTERS DINNER

Monday May 3, 1965—7:00 P.M.

(Queen Charlotte Hotel—Chelsea Room)

DINNER MEETING
Introduction of Guests . . . . . E. J. Hocutt, Chairman
Invocation: T. Franklin Williams, M.D., UNC School of Medicine, Chapel Hill
Guest Speaker: George W. Paschal, Jr., M.D., President-Elect, Medical Society of State of North Carolina, Raleigh
Award for Outstanding Student Paper

Tuesday, May 4, 1965

7:30 A.M.—Dutch Breakfast—(Queen Charlotte—Tryon Room)—Rachel D. Davis, M. D., presiding
Speaker: H. Curtis Wood, Jr., M.D., Medical Field Consultant, Human Betterment League Ft. Washington, Pennsylvania

8:00 A.M.—Medical Women—Dutch Breakfast
ALL WOMEN DOCTORS CORDIALLY INVITED TO ATTEND
(Uncle John's Pancake House—across from Merchandise Mart)

8:30 A.M.—Scientific and Technical Exhibits Open
(Exhibit Hall—Merchandise Mart)

8:30 A.M.—Registration opens, Booth
(Lobby—Merchandise Mart)

POSTGRADUATE AND AUDIO-VISUAL PROGRAM
John C. Grier, Jr., M.D., Chairman, Pinehurst
(Morning Session—Audio-Visual Room—Merchandise Mart)
William W. Forrest, M.D., Greensboro, Moderator

9:00 A.M.—NEUROSURGICAL THALAMOTOMY FOR THE TREATMENT OF PARKINSON'S DISEASE AND RELATED DISORDERS
Various steps in surgical relief of symptoms of idiopathic and postencephalitic parkinsonism.

9:30 A.M.—CEREBRAL VASCULAR DISEASES: THE CHALLENGE OF DIAGNOSIS
Different features of thrombosis, hemorrhage, and focal ischemia. The need for a systematic clinical investigation.

10:00 A.M.—STROKE—EARLY RESTORATIVE MEASURES IN YOUR HOSPITAL
Good, early management in the rehabilitation of the stroke patient upon admission and in the subsequent early phase.

10:30 A.M.—HYPERBARIC UNIT THERAPY
Description of work with the hyperbaric unit at Duke University School of Medicine

11:00 A.M.—MANNED ORBITAL FLIGHT
N.A.S.A. film of medical problems encountered in space flight.

SECOND GENERAL SESSION

Tuesday, May 4, 1965

(Main Meeting Room—Merchandise Mart)

8:30 A.M.—FILM:

9:00 A.M.—Convene Session
T. S. Raiford, M.D., President

9:00 A.M.—
11:00 A.M.—"SYMPOSIUM ON SHOCK"
Moderator: Nathan A. Womack, M.D., UNC School of Medicine, Chapel Hill
Panelists: Harold D. Green, M.D., Bowman Gray School of Medicine, Winston-Salem —(Medicine)
David C. Sabiston, Jr., M. D., Duke Univ. Medical Center, Durham—(Surgery)
Lewis S. Rathbun, M.D., Asheville—(Ob-Gyn)
Ivan W. Brown, Jr., M.D., Duke Univ. Medical Center, Durham (Patho-physiology)

11:00 A.M.—Annual Address of the President
T. S. Raiford, M.D., Asheville

11:30 A.M.—Address: Edward R. Annis, M.D., Past President, American Medical Association, Miami, Fla.

12:00 Noon—ANNOUNCEMENTS
ADJOURNMENT

ALUMNI LUNCHEONS

Tuesday, May 4, 1965—1:00 P.M.

University of North Carolina Medical Alumni Association
(Queen Charlotte—Ballroom)

Wake Forest College—Bowman Gray Alumni Association
(Queen Charlotte—Chelsea Room)

N. C. Academy of Preventive Medicine
(Uncle John's Pancake House)

Medical Advisory Board, North Carolina State Commission for the Blind
(Nixon Brothers Steak House, 4125 N. Independence Blvd.)

POSTGRADUATE AND AUDIO VISUAL PROGRAM

John C. Grier, Jr., M.D., Chairman, Pinehurst

(Afternoon Session—Audio-Visual Room—Merchandise Mart)

William W. Shingleton, M.D., Durham, Moderator

2:00 P.M.—CORONARY ARTERIOGRAPHY
Normal and abnormal coronary artery structure as visualized by cine coronary arteriography.

2:30 P.M.—SURGERY OF ARTERIAL OCCLUSIVE DISEASE
Various patterns of atherosclerotic occlusive disease. Methods of diagnosis. Corrective surgical techniques.

3:00 P.M.—DYNAMICS OF TUMOR EMBOLISM
Development and characteristics of carcinoma in ascitic fluid. The rabbit ear chamber. Micro-injection techniques of studying tumor cell invasion with the Knisely quarts rod. The intravascular behavior of carcinoma cells.

3:30 P.M.—AIR TRAVEL AND THE CARDIO-PULMONARY PATIENT
Clinical method of evaluation of ambulatory patients to perform commercial air travel.

4:00 P.M.—CLINICAL MEDICAL ELECTRONICS
Various medical electronic instruments for use in the office, hospital, laboratory, and home. Future possibilities in the field of biomedical engineering.

SECOND MEETING OF THE HOUSE OF DELEGATES
Tuesday, May 4, 1965, 2:30 P.M.
(Merchandise Mart—3rd Floor—Room C-331)
(Agenda will be available)

SECTION ON ANESTHESIA
Tuesday, May 4, 1965, 2:30 P.M.
(Room #2—Merchandise Mart)
Michel Bourgeois-Gavardin, M.D., Chairman, Durham

VENTILATION, ASSISTED OR CONTROLLED?
Kenneth D. Hall, M.D., Associate Professor of Anesthesiology, Duke University Medical Center, Durham

RESUSCITATION EFFORTS IN PREVENTABLE ANESTHETIC DEATHS
Luther C. Hollandsworth, M.D., Assistant Professor of Anesthesiology, N. C. Memorial Hospital, Chapel Hill

THE BASIS OF SAFE OBSTETRICAL ANESTHESIA AND ANALGESIA
Herschel King, M.D., Assistant Professor of Anesthesiology, Duke University Medical Center, Durham

RESUSCITATION OF THE NEWBORN
C. Max Drummond, M.D., Presbyterian Hospital, Charlotte

SECTION ON PEDIATRICS
Tuesday, May 4, 1965, 2:30 P.M.
(Room #1—Merchandise Mart)
George E. Prince, M.D., Chairman, Gastonia

READING DIFFICULTIES IN SIX, SEVEN, AND EIGHT YEAR OLD CHILDREN
L. B. Holt, M.D., Winston-Salem

USEFUL ANTIDOTES IN THE TREATMENT OF POISONING
Jay M. Arena, M.D., Duke Hospital, Durham

IDIOPATHIC HYPOPARATHYROIDISM ASSOCIATED WITH CHRONIC MONILIASIS
Bryant L. Galusha, M.D., Charlotte Memorial Hospital, Charlotte

CRYPTORCHIDISM
A. Douglas Rice, M.D., Durham

SECTION ON GENERAL PRACTICE OF MEDICINE
Tuesday, May 4, 1965, 2:30 P.M.
(Main Meeting Room—Merchandise Mart)
James B. Greenwood, M.D., Chairman, Charlotte

RENAL GLYCOSURIA
Case presentations and review of literature
John T. Dayton, M.D., Charlotte

CHRONIC URETHRITIS IN THE FEMALE
Archie Barringer, M.D., Mount Pleasant

PANEL DISCUSSION: THE CREATION OF A GENERAL PRACTITIONER
Eugene J. Guazzo, Senior Medical Student, Duke University Medical School, Durham, representing the medical student.

Wilbert C. Davison, M.D., Former Dean, Duke University Medical School, Durham, representing the medical schools.

Bryant L. Galusha, M.D., Medical Director, Charlotte Memorial Hospital, representing the teaching hospitals.

Robert H. Shackelford, M.D., President, North Carolina Academy of General Practice, Mt. Olive, representing the practicing physician.

ELECTION OF OFFICERS

ADJOURN

SECTION ON PUBLIC HEALTH AND EDUCATION

Tuesday, May 4, 1965, 2:30 P.M.

(Room #4—Merchandise Mart)

William L. Wilson, M.D., Chairman, Raleigh

ENVIRONMENT

THE PRIVATE PRACTICE OF MEDICAL PROGRESS

MODERATOR: W. F. Mayes, M.D., Dean, School of Public Health, University of North Carolina, Chapel Hill

YOUR HORIZONS ARE SHOWING, DOCTOR!—Dean W. F. Mayes

MEDICAL SPACE: ULTIMATE PRACTICE: Mac Roy Gasque, M.D., Corporate Medical Director Olin Mathieson Chemical Corp., Pisgah Forest—New York—Universe?

ALL HORIZONS AREN'T GOVERNMENTAL—Isabella S. Diamond, Project Director American Association of Workers of the Blind, Inc., Washington, D. C.

REHABILITATION: IT'S REWARDING: Mary E. Switzer, Commissioner of Vocational Rehabilitation, Department of Health, Education & Welfare Washington, D. C.

SUMMARY: TRACKING A MEDICAL COURSE—Dean Mayes

SECTION ON OPHTHALMOLOGY & OTOLARYNGOLOGY

Tuesday, May 4, 1965—2:30 P.M.

(Room #3—Merchandise Mart)

Ruth Leonard, M.D., Chairman—Charlotte

ORBITAL FRACTURES
John R. Ausband, M.D., and Joel P. Smith, M.D., Winston-Salem

TEACHING OF BLIND CHILDREN—A DEMONSTRATION
Mr. Egbert N. Peeler, Superintendent North Carolina School for the Blind, Raleigh

REPAIR OF TYMPANIC PERFORATIONS
E. F. Shaver, M.D., Charlotte

RETINAL RESPONSES TO ISCHEMIA AND HYPEROXIA
Banks Anderson, Jr., M.D., Durham

PHYSIOLOGIC SEPTOPLASTY AND RHINOPLASTY
Carl N. Patterson, M.D., Durham

SPONTANEOUS RESOLUTION OF CAROTID CAVERNOUS SINUS FISTULA WITH TOTAL OPHTHALMOPLEGIA
Edward K. Isbey, M.D., Asheville

SECTION ON ORTHOPAEDICS AND TRAUMATOLOGY

Tuesday, May 4, 1965—2:30 P.M.

(Room #5—Merchandise Mart)

Charles Highsmith, M.D., Chairman, Troy

PANEL DISCUSSION: TRAUMA IN CHILDREN

MOREDATOR: Charles F. Heinig, M.D., Charlotte

THORACIC SURGERY
Paul W. Sanger, M.D., Charlotte

PROBLEMS OF CHILDHOOD UROLOGICAL TRAUMA
H. Haynes Baird, M.D., Charlotte

ORTHOPAEDIC ASPECT OF TRAUMA IN CHILDHOOD
John A. Powers, M.D., Charlotte

MAXILLOFACIAL AND PLASTIC SURGERY IN CHILDREN
William T. Berkeley, Jr., M.D., Charlotte

DIFFERENCES OF TRAUMA TO THE CHILD—A NEUROSURGEON'S POINT OF VIEW
George C. Blanchard, M.D., Charlotte

ABDOMINAL ASPECTS OF PEDIATRIC TRAUMA
Joe M. Van Hoy, M.D., Charlotte

SECOND MEETING OF THE HOUSE OF DELEGATES

Tuesday, May 4, 1965—2:30 P.M.

(Merchandise Mart—3rd Floor—Room C-331)

(Agenda will be available)

4:30 P.M.—Registration closes.

5:00 P.M.—Exhibits close.

5:00 P.M.—Audio-Visual Program closes.

PRESIDENT'S DINNER

Tuesday, May 4, 1965

(Park Center Auditorium)

7:00 P.M.—BANQUET (Admission by ticket only)
Toastmaster: David G. Welton, M.D., Charlotte
Invocation: Dr. Warner L. Hall, Covenant Presbyterian Church, Charlotte

7:30 P.M.—Presentation of Guests

7:40 P.M.—Presentation of President's Jewel: Amos N. Johnson, M.D., Garland

7:50 P.M.—Installation of President-Elect George W. Paschal, Jr., M.D., Raleigh
Administration of Authorized Oath of Office
An Address in Acceptance: George W. Paschal, Jr., M.D., President

8:15 P.M.—Recognition of FIFTY-YEAR CLUB and presentation of Fifty-Year Club Pins and Certificates.

8:30 P.M.—ADDRESS: Mr. Thomas J. Anderson, President
Farm & Ranch Publications
Nashville, Tennessee

10:00 P.M.—

2:00 A.M.—PRESIDENT'S BALL
(Park Center Auditorium)
(Jan Garber and his Orchestra)

Wednesday, May 5, 1965

9:00 A.M.—Registration Desk opens, Booth
(Lobby—Merchandise Mart)

9:00 A.M.—Scientific and Technical Exhibits open
(Exhibit Area—Merchandise Mart)

THIRD GENERAL SESSION

Wednesday, May 5, 1965

(Main Meeting Room—Merchandise Mart)

8:30 A.M.—Film

9:00 A.M.—Convening Session
Hubert McN. Poteat, Jr., M. D., First Vice President, presiding

9:00 A.M.—CONJOINT SESSION of the North Carolina State Board of Health, Lenox D. Baker, M.D., President, Durham, will preside over the meeting of the Medical Society of the State of North Carolina and the State Board of Health.
J. W. Roy Norton, M.D., State Health Director, reporting

9:30 A.M.—Committee on Scientific Awards, Report of:
Lester A. Crowell, Jr., M.D., Chairman, Lincolnton
Recognition and presentation of: Moore County, Wake County, and Gaston County Awardees.
Presentation of AMA-ERF Checks to: Duke, UNC and Bowman Gray Medical Schools.

9:45 A.M.—PANEL DISCUSSION:
Moderator: M. Barnes Woodhall, M. D.,
Vice Provost
Duke University
Durham

Panelists: Duke University School of Medicine: William G. Anlyan, M. D., Dean
Wilburt C. Davison, M.D., former Dean
Bowman Gray School of Medicine: Manson Meads, M.D., Dean
Coy C. Carpenter, M.D., former Dean
UNC School of Medicine: Isaac M. Taylor, M.D., Dean
W. Reece Berryhill, M.D., former Dean

11:15 A.M.—Address: President George W. Paschal, Jr., M.D., Raleigh

11:45 A.M.—Elections
Installation of Officers

12:00 Noon—Presentation of Prizes
ADJOURN SINE DIE

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A private hospital for diagnosis and treatment of psychiatric and neurological patients.

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James Asa Shield, M.D.
George S. Fultz, Jr., M.D.
Edward W. Gamble, III, M.D.
Weir M. Tucker, M.D.
Silvia Luik, M.D.
Catherine T. Ray, M.D.

Bulletin Board

COMING MEETINGS

North Carolina Physical Therapy Association, Annual Meeting—Winston-Salem, April 2-3.

Refresher Course in Anesthesia—Duke University Medical Center, Durham, April 8-9.

North Carolina Tuberculosis Association and North Carolina Thoracic Society, Annual Meetings—Robert E. Lee Hotel, Winston-Salem, April 22-23.

North Carolina Chapter, American College of Surgeons—Blockade Runner Hotel, Wrightsville Beach, April 23-24.

Medical Society of the State of North Carolina, Annual Session—Charlotte, May 1-5.

North Carolina Heart Association, 16th Annual Meeting—Jack Tar Hotel, Durham, May 20-21.

Tri-State Medical Association—The Carolinian Hotel, Nags Head, June 7-9.

Mountain Top Medical Assembly—Waynesville, June 17-19.

Duke Medical Postgraduate Course—Morehead City, July 12-17.

North Carolina Academy of General Practice, Fifth Charlotte Postgraduate Seminar—Charlotte, September 29-30.

Fifth District Medical Society Annual Meeting—Mid Pines Club, Southern Pines, October 6.

New Members of the State Society

Drs. John Sandall Howie, P, 2930 Hostetler St., Raleigh; Frances Edmonds Wood, P, 406 Montford Avenue, Asheville; Robert Curtis Heymann, D, 118 Forsyth Medical Park, Winston-Salem; Charles Otis Boyette, 313 Front Street, Belhaven; Jim Fuller Hicks, Pd, Route 1, Box 2, Wilson; John Jefferson Lund, 112 Gray Street, Wilson; Henry Dailey Haberyan, Path, 1215 Peachtree Road, Wilson; Albert Tyson Jennette, Or, 302 Forest Hills Road, Wilson; Wiley Royster Young, GP, 104 S. Dunn Street, Angier.

News Notes from the University of North Carolina School of Medicine

The following new faculty appointments, promotions, retirements, and resignations in the School of Medicine have been approved by trustees of the University.

Dr. William G. Hollister, former chief of the Community Research and Services Branch of the National Institute of Mental Health in Bethesda, became associate professor of psychiatry on February 1.

Dr. Arthur Leonard Finn, a research fellow at the National Heart Institute and Dr. Robert A. Goyer, director of laboratories at Cardinal Glennon Hospital in St. Louis, will both join the School of Medicine on July 1, Dr. Finn as assistant professor of medicine and Dr. Goyer as assistant professor of pathology.

Dr. John A. Ewing, acting chairman of the Department of Psychiatry, has been promoted to departmental chairman.

Dr. Christopher C. Fordham III has been promoted to associate professor of medicine and chairman of the Student-Faculty Advisory Board.

The retirement of two departmental chairmen in the School of Medicine was approved effective July 1. Dr. D. A. MacPherson, chairman of the Department of Bacteriology, will continue as a professor of bacteriology, and Dr. Robert A. Ross will relinquish his chairmanship but will continue as professor of obstetrics and gynecology.

Resignations were accepted from Dr. Robert B. Hughes, a psychologist in the Department of Psychiatry, who has moved to the Minnehaha Guidance Center in Sioux Falls, South Dakota, and Dr. A. Stark Wolkoff, an obstetrician-gynecologist who has accepted a position at the University of Kansas School of Medicine.

* * *

The National Institute of Allergy and Infectious Diseases has approved a grant of about $95,000 to continue research into the nature of psittacosis and related organisms. Dr. G. P. Manire, professor of bacteriology, is the principal investigator for the study.

Dr. Manire returned to Chapel Hill recently after a year of special study on psittacosis organisms at the Institute on Virus Research, Kyoto University in Japan.

Dr. Akira Tamura, a biochemist at Kyoto University with whom Dr. Manire worked while in Japan, will come to Chapel Hill in March to participate in the basic research study in progress here.

* * *

In North Carolina last year an estimated 7,500 babies—almost one every hour—were born with defects and deformities ranging from color blindness and speech defects to brain and heart disorders, missing limbs and paralysis.

Forty of these babies were added to the list of patients being seen at a special Birth Defects Treatment Center at N. C. Memorial Hospital, the only center of its kind in the state. A grant of $35,843 was announced in February by the March of Dimes to operate the center for another year.

* * *

A report of a computer's success in handling the inventory problems of the blood bank at N. C. Memorial Hospital was presented here at a regional meeting of pathologists by Dr. Jerry C. Pickrel of Pathology, Associates in Lumberton and a visiting lecturer in pathology at the University of North Carolina School of Medicine.

He spoke to doctors attending a two-day winter meeting of the Southeastern Region of the College of American Pathologists and the North Carolina Pathology Society.

* * *

Ways in which a medical center can assist community hospitals in upgrading standards of medical performance are outlined in the December issue of Modern Hospital by the consulting director of N. C. Memorial Hospital here.

Dr. Robert R. Cadmus, author of the article, states that hospitals and doctors in the future will become increasingly inseparable and, consequently, all hospital administrators will face a changing role.

* * *

A grant of $126,853 has been awarded by the U.S. Public Health Service for the general support of research and research training in medicine at U.N.C. Such funds are made on a continuing basis by USPHS to eligible universities engaged in health-related research and research training.

* * *

Dr. Ernest Craige of the U.N.C. Department of Medicine served recently on the visiting faculty for courses in recent advances in cardiology at the University of Puerto Rico School of Medicine and Dentistry and at the University of West Indies in Jamaica.

* * *

A study of chronic alcoholism will be continued at the University of North Carolina School of Medicine under an additional federal grant of $16,560.

The funds have been awarded to Dr. Fred W. Ellis, UNC pharmacologist, by the National Institute of Mental Health.

* * *

Three physicians—one from England, one from South Africa, and the third from Chicago—have joined the residency training program in psychiatry at the U.N.C. Psychiatry Center.

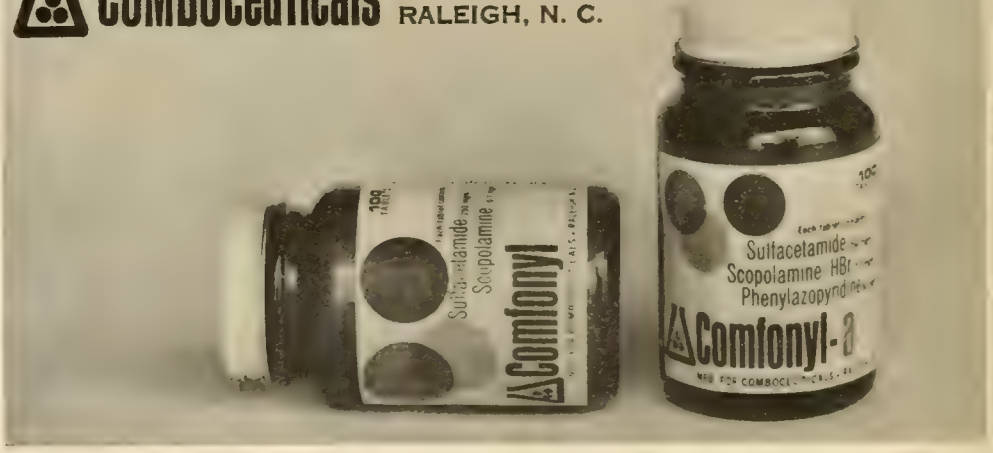
The newcomers are Dr. Peter C. Whybrow of London, England; Dr. Joe Mendels of Cape Town, South Africa; and Dr. George Schmidt, a native of Chicago who came here after an internship at Duke Hospital in Durham.

* * *

Representatives of the Southeastern Region of the College of American Pathologists met recently for a two-day winter meeting at the UNC School of Medicine.

The program included talks on bleeding diseases, drugs and drug resistance, tests used to predict diseases in which the heart is involved,

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3. SULFAMETHYLTHIADIAZOLE	120	10	150	21	260	45
4. SULFISOXAZOLE	36	30	51	44	80	70
5. SULFAETHYLTHIADIAZOLE	360	225	380	230	440	250
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* * *

Dr. Erle E. Peacock, Jr., associate professor of surgery, related the activities of UNC's unique Hand Rehabilitation Center at a sectional meeting of the American College of Surgeons held recently in Atlanta.

* * *

A 28-year-old Baltimore veterinarian has been appointed director of the animal laboratory facility and an instructor in comparative pathology at the University of North Carolina School of Medicine here.

The appointment of Dr. James R. Pick, Jr. became effective January 1. Since mid-1961 he has been with the National Academy of Sciences Institute of Laboratory Animal Resources.

News Notes from the Duke University Medical Center

North Carolina Civitans meeting in Goldsboro recently announced plans to donate $100,000 toward the construction of a research center for the study of the mentally retarded which will be located on the Duke University Campus.

North Carolina Civitan Governor M. M. Richards of Salisbury said that the decision to locate the new research center on the Duke campus followed state Civitan acceptance of a proposal by the division of child psychiatry of Duke University.

The new building will be constructed at a cost of some $400,000 and will have a $225,000 annual budget. Other sources of support for the building's construction and the center's budget have not been announced.

Research will be carried out in a cooperative effort by the departments of psychiatry, pediatrics, and obstetrics and in close relation with the departments of psychology and education.

* * *

A leading cause of illness and death among victims of paralysis, spinal cord injuries, and other neurologic disorders, such as strokes, multiple sclerosis and many birth defects, were the focus of a national symposium at Duke in February.

The "Symposium on the Neurogenic Bladder" was sponsored by the U. S. Government's Vocational Rehabilitation Administration. Hosts for the event was the Duke University Medical Center's Division of Urologic Surgery.

* * *

Dr. Edward S. Orgain, professor of internal medicine and director of the cardiac clinic at Duke University, will be the new editor of **Modern Concepts of Cardiovascular Disease**, monthly scientific publication for the practicing heart specialist and family physician issued by the American Heart Association.

Dr. Orgain will take over the editorship for a



for psychiatric treatment

Peachtree Hospital, located in Atlanta, Georgia, is a complete psychiatric, alcoholic and drug addiction treatment facility accredited by the Joint Commission on Accreditation of Hospitals ☐ The hospital has 65 beds, 47 of which are devoted to the care of psychiatric patients and 18 of which, in a separate area, are for patients with acute cases of chronic alcoholism or drug addiction ☐ Treatment procedures include psychotherapy, electroconvulsive shock therapy, subinsulin coma and chemotherapy ☐ *We will be pleased to provide further information upon request.*

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peachtree hospital

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three-year term, beginning with the January 1966 issue. He succeeds Dr. E. Cowles Andrus, who will complete his third year in the post in December 1965.

* * *

Dr. J. Leonard Goldner, professor of orthopaedic surgery, participated in a panel discussion on hand injuries at a regional meeting of the American College of Surgeons in Philadelphia. In this connection he presented a scientific paper on tendon grafts.

News Notes from the Bowman Gray School of Medicine of Wake Forest College

A recently established distinguished lectureship series sponsored by the Z. Smith Reynolds Foundation will bring four nationally prominent speakers to the Bowman Gray School of Medicine each year.

Two of the lectures were presented in February by Dr. Henry T. Bahnson and Dr. Howard C. Taylor, Jr.

Dr. Bahnson, professor and chairman of the Department of Surgery at the University of Pittsburgh School of Medicine, spoke on "Surgery of the Aortic Valve." Dr. Taylor, professor and chairman of the Department of Obstetrics and Gynecology at Columbia University College of Physicians and Surgeons, lectured on "Cancer of the Ovary and the Phenomenon of Different Degrees of Malignancy."

Dr. William B. Castle, Nobel laureate and Peabody Professor of Medicine at Harvard Medical School, will present a May 13 lecture. A fourth lecture will be scheduled for next fall. All of the lectures will be held in the medical school amphitheater.

* * *

Dr. Homer A. Paschall has been appointed to the faculty of the Bowman Gray School of Medicine as assistant professor of orthopedics.

Dr. Paschall, a graduate of the Bowman Gray School of Medicine, is one of four researchers in the United States—one of seven in the world—who are currently studying the structure of bone cells by means of the electron microscope. Perhaps his most significant accomplishment was the development of a technique for combining autoradiography with electron microscopy for research on bone formation and destruction. This work was done at Johns Hopkins University School of Medicine where Dr. Paschall studied for 18 months as research associate in radiation biology and research fellow in orthopedics.

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James P. King, M.D., Director

William D. Keck, M.D.
Clinical Director
James K. Morrow, M.D.

Morgan E. Scott, M.D
Edward E. Cale, Jr., M.D.
J. William Giesen, M.D
Internist (Consultant)

Clinical Psychology:
Thomas C. Camp, Ph.D.
Artie L. Sturgeon, Ph.D.

Don Phillips
Administrator

AFFILIATED CLINICS

Bluefield Mental Health Center
525 Bland St., Bluefield, W. Va.
David M. Wayne, M.D.
Phone: 325-9159

Beckley Mental Health Center
109 E. Main Street, Beckley, W. Va.
W. E. Wilkinson, M.D.
Phone: 253-8397

Charleston Mental Health Center
1206 Quarrier Street, Charleston, W. Va.
Malcolm G. MacAulay, M.D.
Phone: 344-3578

Mental Health Clinic
Professional Building, Wise, Va.
Pierce D. Nelson, M.D.
Phone: 328-2211

Approval has been voted by the Society of the Sigma Xi for the establishment of a chapter of the honorary research organization in Winston-Salem.

Sigma Xi is a national society devoted to the promotion and advancement of research in science.

The new chapter, an outgrowth of the Sigma Xi Club of the Bowman Gray School of Medicine, will be known as the Wake Forest College Chapter of the Society of the Sigma Xi.

* * *

Dr. Frank R. Lock, professor and chairman of the Department of Obstetrics and Gynecology at the Bowman Gray School of Medicine, has started a major study on the relation of birth defects to German measles.

He has been awarded a $105,423 grant by The National Foundation-March of Dimes to support the work for a two-and-one-half year period.

* * *

Seven students and one faculty member at the Bowman Gray School of Medicine have been elected to membership in Alpha Omega Alpha, medical honor society.

Senior students elected were Thomas R. Blackburn of Mooresboro; W. Michael Bolt of Charlotte; Robert M. Dacus III of Greenville, S. C.; Sheldon G. Fagen of Brooklyn, N. Y.; and Godfrey P. Oakley Jr. of Greenville.

Elected from the junior class were C. Linwood Puckett of Burlington and Darrell P. Thorpe of Flint, Mich. Dr. Robert W. Prichard, professor of pathology and editor of the NORTH CAROLINA MEDICAL JOURNAL, was elected from the faculty.

* * *

Dr. Felda Hightower, associate professor of surgery at the Bowman Gray School of Medicine, has been elected to a five-year term as treasurer of the Southern Surgical Association.

He was also named editor of "Transactions of the Southern Surgical Association." This book, published annually, contains scientific papers presented at the annual meeting of the association.

* * *

Dr. James A. Harrill, professor of otolaryngology, presented a paper on "Combined Lateral Rhinotomy and Transpalatine Approach to Tumors of the Nasopharynx" at a meeting of the Southern Section, Triological Society, in Charleston, S. C.

* * *

Dr. Stephen H. Richardson, assistant professor of microbiology, was one of 100 participants in a Symposium on Cholera Research January 24-29 in Honolulu, Hawaii. He presented a paper on "The Effects of Vibrio Cholera Extracts on Membrane Transport Mechanisms."

APPALACHIAN HALL

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ROBERT A. GRIFFIN, M.D.
MARK A. GRIFFIN, SR., M.D.
MARK A. GRIFFIN, JR., M.D.

For rates and further information write APPALACHIAN HALL, ASHEVILLE, N.C.

Dr. Harold D. Green, professor and chairman of the Department of Physiology, participated in a recent Workshop on Cerebral Blood Flow in Miami. The workshop was sponsored by the two Neurology Study Sections of the National Institutes of Health.

* * *

Dr. Frank C. Greiss Jr., assistant professor of obstetrics and gynecology, was recently elected to membership in the Society for Gynecologic Investigation and the North Carolina Obstetrical and Gynecological Society.

* * *

Dr. Richard T. Myers, associate professor of surgery, spoke on "Septic Shock" at a meeting of the American College of Surgeons in Atlanta, Ga.

NATIONAL CONFERENCE ON RURAL HEALTH

Means of providing full-range health services for the nation's 60,000,000 rural residents was discussed at the 18th National Conference on Rural Health March 26-27 in Miami Beach.

W. Wyan Washburn, M.D., Boiling Springs, North Carolina, is chairman of the American Medical Association's Council on Rural Health, which is sponsoring the meeting.

AMERICAN ACADEMY OF GENERAL PRACTICE

Dr. Amos Johnson to Become President

Dr. Amos N. Johnson of Garland will be inaugurated as president of the American Academy of General Practice at the 17th Annual Assembly of the organization to be held in San Francisco, April 12-16. Following his inauguration, which will take place Thursday evening, April 15, he will be honored at a reception.

The Assembly—the U.S.'s largest medical convention next to AMA's yearly meeting—will focus attention on community health problems and the family physician's responsibility toward them. New slants on such timely issues as abortion and conception control and the dangers of pesticides will be featured on the program, which will include not only an extra day of medical lectures but 24 clinical refresher courses.

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For further information and application form, write: William B. Terhune, M.D., Medical Director, The Silver Foundation, Box 1177, New Canaan, Connecticut.

Dr. Paul Tournier to Lecture in Greensboro

Dr. Paul Tournier, noted Swiss physician, psychiatrist, and author, will give a series of lectures in Greensboro, April 22 and 23.

On Thursday, April 22, at 8 p.m., he will deliver a public lecture in the Greensboro Public Library auditorium on "The Meaning of Persons."

On Friday, April 23, he will be heard twice at Moses H. Cone Memorial Hospital. At 9:30 a.m. he will address the hospital employees and staff on "The Meaning of Work in a Hospital." At 2:30 p.m. he will participate in a symposium on "The Healing of Persons in a Modern Hospital."

Joining Dr. Tournier in the symposium will be Rabbi Joseph Asher, Temple Emanuel, Greensboro; Monsignor Hugh Dolan, St. Pius Tenth Church, Greensboro; and the Rev. Fred W. Reid, Jr., chaplain, North Carolina Memorial Hospital, Chapel Hill.

The concept of Medicine of the Person has been widely disseminated through Dr. Tournier's books and the International Meetings on Medicine of the Person held annually in Europe since 1947.

North Carolina Pathologists Certified

The following North Carolina physicians were recently certified as Diplomates of the American Board of Pathology:

Victor G. Kokiko, M.D., Wayne County Memorial Hospital, Goldsboro

William W. Forrest, M.D., Wesley Long Hospital, Greensboro

Charles M. Hassell, Jr., M.D., Moses H. Cone Memorial Hospital, Greensboro

James T. Maddux, Jr., M.D., Rowan Memorial Hospital, East Spencer.

North Carolina Pediatric Society

The North Carolina Pediatric Society has announced the following slate of officers for 1965: president—Dr. Charles H. Gay, Charlotte; president-elect—Dr. John F. Lynch, Jr., High Point; past-president—Dr. Jay. M. Arena, Durham; secretary-treasurer—Dr. Mary Louise Rutledge, Charlotte.

Hospital Care Association

The election of two prominent North Carolina citizens—Thomas A. Finch of Thomasville and W. C. Harris Jr. of Raleigh—as public representatives on the Board of Directors of Hospital Care Association of Durham has been announced by E. M. Herndon, president.

Finch is president and chief executive officer of the Thomasville Furniture Industries.

Harris is a practicing attorney in Raleigh with the firm of Holding, Harris, Poe and Cheshire.

The two new directors fill public member vacancies on the Board created by the deaths of B. R. Roberts of Durham and Thomas W. Steed of Raleigh.

Edgecombe-Nash Medical Society

Mr. Henry Betrand, clinic manager of the Wilson Clinic and formerly associated with the Duke University diagnostic clinic, discussed "The Effects of Automation on the Practice and Business Aspects of Medicine" at the February meeting of the Edgecombe-Nash Medical Society.

American Academy of Pediatrics

Serious doubt concerning the usefulness of gamma globulin as a means of preventing rubella (German measles) among pregnant women has been expressed by the American Academy of Pediatrics.

Two Committees—on the Control of Infectious Diseases and on Congenital Malformations—in a joint statement advised physicians that they should make decisions and recommendations for the management of pregnant women exposed to German measles "on the assumption that there is still no firm evidence that immune globulin is effective in reducing the risk of congenital anomalies."

The statement appeared in the January News Letter for Academy members.

Recent experimental studies involving blood tests and virus isolation from patients injected with immune globulin and rubella virus "suggests that immune globulin may suppress only the clinical manifestations of rubella without preventing the occurrence of infection or viremia," the Committees said. "It has not been established whether such viremia, in the absence of other manifestations of rubella in the first trimester of pregnancy, can be associated with fetal damage."

Thus the Committees concluded that "there is less reason than before to justify the use of immune globulin for susceptible women exposed to rubella during the first trimester of pregnancy."

American Hospital Association

A new motion picture showing the operation of a psychiatric service in a general hospital has been released by the American Hospital Association.

The film, titled "Psychiatric Services in General Hospitals," is presented by the AHA, the American Psychiatric Association and E. R. Squibb and Sons, in cooperation with the Hospital Research and Educational Trust.

The 25-minute, 16mm., color documentary is primarily intended for hospital trustees, administrators, medical staffs, nurses, and other hospital

personnel, but it will also be available to other community agencies on a loan basis. Boards of general hospitals considering the establishment of a psychiatric service will find the film useful as a guide to the recommendations of the AHA and APA.

The new film was produced by Campus Film Productions, Inc. Requests for loan or purchase of the film should be made to the American Hospital Association, 840 N. Lake Shore Drive, Chicago, Illinois 60611.

Bed Sores, Infected Wounds Heal Rapidly On Insertion Of Absorbable Gelatin Sponge

Infected wounds and bed sores—long a difficult medical problem—healed rapidly in a series of cases in which absorbable gelatin sponge was placed in the wound once a day.

In 24 patients given the treatment, the average healing time was 30 days, according to Drs. Leslie W. Freeman and John E. Joyner, who conducted the trial. The clinicians are associated with the Department of Surgery at Indiana University Medical Center, Indianapolis.

They pointed out that a large number of patients with similar ulcers and infected wounds had been treated with many different substances without any dramatic improvement.

When treatment with Gelfoam was started, the wounds were free of dead tissue in all cases but there were secretions of pus ranging from excessive to moderate. Within a few days, the secretions became clear and decreased sharply in volume, the physicians said.

The reason for the effectiveness of the treatment has not been determined. Gelfoam, developed in research laboratories of The Upjohn Company, has been widely used in surgery and serious injuries.

"Cancer of the Stomach," a pamphlet prepared by the National Cancer Institute to give the public a clearer understanding of the disease, has been issued by the Public Health Service, Department of Health, Education, and Welfare.

Single copies of "Cancer of the Stomach" (PHS Publication No. 1237) are available without charge from the Public Health Service, Washington, D. C. 20201. The pamphlet may be purchased in quantity from the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402, at 5 cents a copy or at $3.25 per 100 copies.

More than 390,000 American lives were lost in battle during World War II. During the same period, 2,300,000 American died because of heart and blood vessel ailments, says the North Carolina Heart Association.

HEALTH INSURANCE INSTITUTE

By the end of 1964, an estimated 149 million Americans were protected by some form of health insurance against the costs of ill health, the Health Insurance Institute reported recently in a review of the past year.

This figure represents 78% of the U.S. civilian population, the Institute said, and is an increase of 3.7 million persons over the number protected in 1963.

Benefits paid to insured persons last year were estimated at $8.6 billion or some $800 million more than in 1963. These benefits were paid by over 1,800 insuring organizations including 903 insurance companies, 77 Blue Cross and 72 Blue Shield plans, and nearly 800 other health care plans.

The Institute said that record highs were established in 1964 in both the number of persons protected and in the amount of benefits paid out.

Classified Advertisments

Furnished office for rent or sale. Excellent opportunity for general practice. Write Dr. Walter J. McLendon, P. O. Box 67, Oakboro, N. C. 28129

Physician Wanted: Physician interested in general practice; excellent opportunity. Piedmont section. Reply in care of the Journal. 84-122-6.

Needed — general physician — family internship by four-man group in growing rural program in West Virginia. Modern clinic facilities, regular visiting specialist consultant staff, scheduled training and vacation periods, foundation sponsorship, no investment required. Starting net income range $14,000 through $18,000 depending on qualifications. Reply in care of the Journal, P. O. Box 790, Raleigh, N. C.

Wanted immediately locum tenens to cover large general practice until July 1, 1965. Guarantee minimum $1,000.00 per month with much more possible. Permanent location may result if desired. N. C. License required. Communicate Director, Midway Clinic, Canton, N. C.

Wanted July 1, 1965 G. P. or Internist to assume large clinic practice. Doctor leaving to specialize. Excellent Opportunity with guarantee of $1,000.00 minimum from start, much more possible. Communicate Director, Midway Clinic, Canton, N. C.

For Sale: Fischer 75 MA X-ray-Fluoroscopy Unit and all accessories. Fischer Diathermy Burdick EK2 Electrocardiograph. C. T. Harris, Jr., M.D., 425 Roberts Street, Salisbury, N. C.

Book Reviews

Marriage Counseling in Medical Practice: A Symposium. Edited by Ethel M. Nash, M.A., Lucie Jessner, M.D., and D. Wilfred Abse, M.D. 368 pages. Price, $8.00. Chapel Hill: The University of North Carolina Press, 1964.

Clinicians have long recognized that problems relating to marriage often have a very definite bearing on illness, both organic and functional. Only in the last several years has there been any real cooperation between the various disciplines interested in this vital field of family life. The present work is the first of its kind, bringing together a number of pertinent topics with a logical division of chapters that makes the book useful for both continuous reading and quick reference.

Subjects covered include those encountered in everyday medical practice, such as Marriage Counseling by Physicians, Premarital Medical Counselling, and Concepts of Marital Diagnosis and Therapy. There is also a section on instruction in marriage counseling in medical school curricula, as well as an excellent chapter by Dr. Harold Lief entitled "Sexual Attitudes and Behavior of Medical Students."

Edited by a marriage counselor and two physicians, this book can be highly recommended for anyone in the clinical practice of medicine. Those in internal medicine, general practice, and obstetrics and gynecology will find the book particularly useful, as it offers many practical suggestions and guides in managing marital problems which arise in relation to medical practice.

Closed-Circuit TV Network To Provide Hospitals With Medical, Nursing Shows

Sometime in the near future, hospitals throughout the nation will be linked together in a closed-circuit television network which will bring to physicians and nurses outstanding programs of information and education on a regularly scheduled basis.

The network, scheduled to go into operation by mid-1965, will carry hour-long shows originating at medical centers in all parts of the nation. Each show will be carried, via AT&T long line cables, directly into subscribing hospitals and there shown on special high-fidelity receiving sets.

The network, called MTC (Medical Television Communications), will carry programming consisting of refresher courses, lectures, symposia, colloquia, reports on new developments in techniques, diagnosis, therapy, and coverage of significant medical and nursing meetings.

The human heart daily pumps enough blood to fill a railroad tank car, says the North Carolina Heart Association.

The Month in Washington

The American Medical Association has urged that Congress approve the Herlong-Curtis Eldercare bill (H.R.3727) as the best answer to the problem of providing medical care to people over 65 who need help in paying hospital and doctor bills.

In testimony presented at a closed hearing of the House Ways and Means Committee, representatives of the AMA also reaffirmed the Association's opposition to the King-Anderson bill, known as Medicare.

The Herlong-Curtis Eldercare bill, incorporating recommendations of the AMA, was introduced by Rep. A. Sydney Herlong, Jr., (D-Fla.) and Rep. Thomas B. Curtis (R., Mo.).

The bi-partisan Herlong-Curtis bill, entitled the Eldercare Act of 1965, would amend the Kerr-Mills law to authorize broad health insurance coverage for elderly persons. It would authorize federal grants to the states on a matching basis to help persons 65 years of age and older pay costs of the health insurance if they could not afford it otherwise. The bill would provide for utilization of Blue Shield and Blue Cross plans and private health insurance companies.

The cost of such coverage would be borne entirely by government for those elderly individuals whose income falls below limits set by each state.

For individuals with incomes above the maximum, government would pay a part of the cost on a sliding scale according to income. Individuals with income above the maximum would pay the entire cost, but they would have the benefits of an income tax deduction for such payments, as well as statewide bargaining for non-cancellable health care policies.

Persons under 65 years of age also would be given an income tax deduction for the amount of premiums paid on non-cancellable health insurance policies to become effective upon retirement.

States could administer the program under state health departments if they so chose. The Kerr-Mills program now is administered by state welfare departments.

Identical bills were introduced by a number of senators and other members of the House, including Rep. Durward G. Hall (R., Mo.), who also is a member of the AMA House of Delegates.

The AMA representatives pointed out that the Eldercare bill was designed to provide the elderly who need financial assistance with a wide range of hospital and medical benefits—far more than the limited benefits Medicare would provide.

Under the Herlong-Curtis Eldercare bill, the amount of financial assistance given to the elderly would be determined by the amount of help required, the AMA noted.

The Eldercare plan would expand and enlarge on the existing Kerr-Mills law, preserving state control over administration and requiring no new payroll taxes on wage earners, the AMA said.

They pointed out that Medicare benefits would be restricted to limited hospitalization, some nursing home care in some nursing homes, some hospital-conected diagnostic services, and home nursing care.

They said all these benefits would be provided under the Eldercare program. But in addition, they said, Eldercare would provide the services of physicians and surgeons, drugs outside the hospital as well as in the hospital, diagnostic services whether connected to hospitalization or not, and other medical services which Medicare would not provide.

At the request of the Johnson Administration, which is pushing the King-Anderson medicare legislation, Rep. Wilbur D. Mills (D., Ark.), chairman of the Ways and Means committee, introduced a sweeping bill (H.R.3699) that would consolidate the federal-state medical programs and extend Kerr-Mills medical benefits to needy children under 21 years of age and their parents.

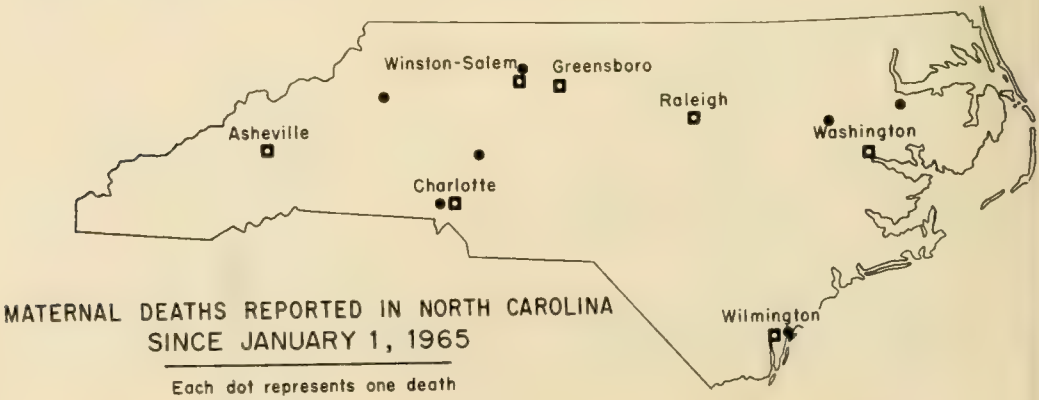
The Administration bill also would require states to follow a flexible income test to determine Kerr-Mills eligibility and to provide specified minimum medical services. These minimum services would include inpatient and outpatient hospital services, other laboratory and X-ray services, nursing home care, and physicians' services "in the (physician's) office, the patient's home, a hospital, or a skilled nursing home."

Johnson & Johnson Introduces New Towel Drape

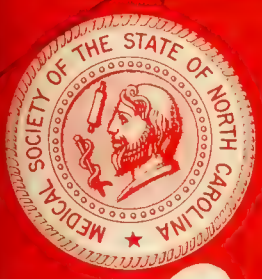
Johnson & Johnson has announced the introduction of the Barrier Towel-Drape for use in any minor surgical or therapeutic procedure requiring a sterile field or positive bacteria barrier.

This new three-layered towel, regarded as an important development in sterile field efficiency, is disposable, moisture proof, lint-free, and absorbent. Constructed with an impervious plastic film liner, the Barrier Towel-Drape completely prevents "flow through" of air, liquids, exudates, and microorganisms. It is impossible for pathogens to pass through the towel from one surface to the other.

Johnson & Johnson markets the 17" x 30" Barrier Towel-Drape both in flat, easy to handle 6¼" x 10" individual Patient-Ready sterile packages and in bulk form designed for inclusion in hospital packs that are to be steam sterilized before use.



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IN THIS ISSUE:

Tuberculosis in North Carolina

Papers by Scott and McCool

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NORTH CAROLINA MEDICAL JOURNAL

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VOLUME 26 APRIL, 1965 NUMBER 4

Tuberculin Testing of School Children in Alamance County

Toward the Eradication of Tuberculosis in North Carolina

ANNIE V. SCOTT, M.D.

CHAPEL HILL

In accepting the challenge to eradicate tuberculosis from any locality, it is essential to determine the present incidence of the disease, a difficult task because of the tendency of tuberculous infection to become latent. Plans to stamp out the disease must include all cases of tuberculous infection, both active and latent. In order to prevent new infection, it is necessary to detect the carriers of the causative organism—the index cases—and to employ measures that will render them incapable of transmitting the organism to others.

A search made in North Carolina in 1955 failed to locate the needed data concerning the incidence of tuberculous infection in this state. Also lacking was information pertaining to the incidence of tuberculosis in the homes of the tuberculin-positive children who were located. Active tuberculous disease was found among children attending pediatric clinics from all parts of the state, but no record was available as to the incidence of the types of tuberculous disease affecting North Carolina children.

In order to collect the essential information, it was necessary to select a representative population—a county—and to set up a plan in cooperation with the local health organization to determine the incidence of infection among the school children of the county. Since the location of index cases is vital to the eradication of tuberculosis, it was hoped to learn what age group would include the greatest number of spreaders of tuberculous infection. The records of North Carolina Memorial Hospital Pediatric Clinic and of Gravely Sanatorium Contact Clinic were reviewed to discover the types of diseases caused by tuberculous infection in North Carolina children.

From the Department of Pediatrics, University of North Carolina School of Medicine, Chapel Hill.

Material and Method

Limitations of staff and funds made it necessary that the county selected be near Chapel Hill. Alamance County, located in the central Piedmont, met this requirement and was considered a representative North Carolina county. The population is stable.

For editorial comment see page 169

Table 1 shows the 1950 census, the latest available when the investigation was planned. The 1950 census gives the percentage of non-whites, chiefly Negroes, as 26.6% in the state and 18.5% in Alamance County. Burlington, the largest urban area, is centrally located and had a population of 27,000 at the time of the survey. Industrial workers are largely housed in one-family dwellings, often in rural settings. Table 2, based on information from the North Carolina State Board of Health[1], shows the tuberculosis case and death rates in the county within the lifetime of the children tested during the period 1955-1957.

Approval of the study and essential cooperation were readily granted by the Alamance County Medical Society and the County Health Department. Plans for conducting tuberculin tests in the schools of the county were organized by pediatricians from the University of North Carolina and the medical director and nurses of the County Health Department. Other cooperating groups include the Alamance County Tuberculosis Association, the county woman's medical auxiliary, the North Carolina State Board of Health, Gravely Sanatorium, and

Table 1
Population—Alamance County

	Total	White	Non-White	Urban	Rural
1950	71,220	58,038	13,182	29,586	41,634
1960	85,674	70,865	14,809	43,865	41,809

the University of North Carolina School of Public Health. Additional staff included volunteers from other county organizations and students from the Schools of Medicine and Nursing of the University of North Carolina.

Members of the County Health Department assumed full responsibility for acquainting the school authorities, parents, and students with plans for the survey and for obtaining the parents' permission for the tests. They also made detailed arrangements in each school for testing the children whose parents had granted permission.

During 1955-1957 tuberculin tests were conducted and interpreted by pediatricians from the University of North Carolina who were experienced in the technique. In the years following, using the same type of antigen and essentially the same technique, the Alamance County Health Department continued the tests in the schools of the county.

When the project was begun in the spring of 1955, it was planned to limit the testing to a sample comprising the first, eighth, and twelfth grades. When this series was completed, however, it was decided to offer the test to all students, and a plan was set up to cover the remaining grades as soon as possible. Table 3 shows the schedule for testing each grade between February, 1955, and February, 1957.

An individual tuberculin syringe and 25-gauge steel needle were used for each injection. This equipment had been sterilized previously in an autoclave at a pressure of 15 pounds for 15 minutes. The antigen used was PPD-S (purified protein derivative—standard), 0.0001 mg injected intracutaneously on the volar surface of the right forearm in a volume of 0.1 ml. The reaction was read after an interval of 48 hours. Induration, when present, was measured and recorded. Induration measuring 5 mm or more in diameter was interpreted as a positive reaction.

Table 2
Reported Tuberculosis Cases and Deaths With Rates Per 100,000 Population Alamance County 1930-1955

Year	Cases		Deaths	
	Number	Rate	Number	Rate
1930	Not Available		25	59.3
1935	14	27.1	14	27.1
1940	68	118.4	19	33.1
1945	36	54.5	8	12.1
1950	53	74.4	8	11.2
1955	25	31.9	3	3.8

Reactor follow-up; home investigation

The County Health Department promptly notified parents of the test results, and assisted them in arranging for clinical and radiologic examinations of children with positive reactions. The County Tuberculosis Association assumed responsibility for providing a 14-by-17-inch roentgenogram of the reactor's chest. These films were interpreted by a member of the Department of Radiology at the School of Medicine, University of North Carolina.

Since the care of a child with a positive tuberculin reaction involves prolonged clinical observation, it was agreed that the reactors be referred to their private physician or to the clinic where they were enrolled for clinical observation. The County Health Department made available to the child's physician the result of the tuberculin test and the chest roentgenogram. The Health Department also assumed primary responsibility for investigating all inmates of the home of each reactor.

Tuberculous Disease among North Carolina Children

Since North Carolina Memorial Hospital and Gravely Sanatorium enrolled children from all parts of the state, it was felt that their records would afford information as to the types of tuberculous disease among North Carolina children. The period of clinical observation covered by this report is from the opening of North Carolina Memorial Hospital at Chapel Hill in 1952 and Gravely Contact Clinic in 1954 to the end of 1963. The tuberculin testing was similar to that carried out in Alamance County. When enrolled for clinic follow-up, each child showing a positive reaction received a com-

Table 3
Distribution of Children Tested by Year and Grade Alamance County—1955-1957

Grade	February 1955 to April 1955	November 1955 to February 1956	October 1956 to February 1957
1	+	+	+
2			
3			
4			+
5			+
6			+
7			+
8	+		+
9			+
10		+	
11		+	
12	+	+	

plete physical evaluation, including posteroanterior and lateral chest roentgenograms. When one of these children was admitted to the hospital, three successive morning gastric aspirates and urine cultures were observed for acid-fast organisms. Spinal fluid and lymph nodes removed from these children were cultured for acid-fast organisms. When bronchoscopic examination was performed, any specimen obtained was likewise cultured. Any acid-fast organism isolated from the cultures was tested for catalase and for isoniazid, para-aminosalicylic acid, and streptomycin sensitivity.

In all cases where an acid-fast organism was not isolated, the diagnosis of tuberculous infection was based upon a positive tuberculin reaction, clinical findings including roentgenograms of the chest, and results of indicated laboratory tests.

Table 4
Alamance Students Tested and Distribution By Race and Sex 1955-1957

Total students eligible for testing	17,857
Test completed (antigen injected, result determined)	15,479
White male	6,330
White female	6,130
Negro male	1,468
Negro female	1,551
Test incomplete	147
Not tested	2,231

Results and Comments

The scope and results of this investigation are summarized in the following tabulations: As shown in Table 3, the investigation represented a survey of all grades in the school population, spread over a period of three school years (1954-1955, 1955-1956, and 1956-1957). A total of 17,857 children eligible for testing were registered in these grades. The distribution of successful and unsuccessful efforts to administer and read these tests is summarized in Table 4. As shown in this table, 15,479 students, or 87% of the eligible population under study, actually had the test completed (that is, tuberculin injection and determination of result at 48 hours).

The results of this testing are recorded in Table 5. Among the 15,479 children tested, 2.5% gave positive reactions. The proportion of positive reactors varied in relation to age, race, and sex. In all groups the percentage of reactors increased with age. In corresponding groups at different age levels, the per cent of reactors was approximately two to two and a half times greater

Table 5
Results of Tuberculin Testing Alamance County School Children By Age, Sex, and Race 1955-1957

Age (Years)		Race and Sex					
		Total	White Male	Female	Total	Negro Male	Female
6-9	Number tested	4527	2307	2220	1168	595	573
	Percent positive	1.0	1.1	0.9	2.1	2.4	1.9
10-14	Number tested	5729	2913	2816	1284	608	676
	Percent positive	2.0	2.0	2.1	4.2	3.6	4.7
15-20	Number tested	2204	1110	1094	567	265	302
	Percent positive	3.9	5.2	2.6	10.2	10.9	9.6
Totals	Number tested	12460	6330	6130	3019	1468	1551
	Percent positive	2.0	2.2	1.8	4.5	4.4	4.6

Table 6
Tuberculin Testing In Alamance First Grades 1955-1957 and 1963-1964

	White				Negro			
School Year	Enrollment	Tested	Positive	% Positive	Enrollment	Tested	Positive	% Positive
1954-55	1670	1209	11	.9	515	330	10	3.0
1955-56	1566	1147	16	1.4	488	340	3	.9
1956-57	1550	1201	6	0.5	528	347	11	3.2
1962-63	1613	1552	5	.3	517	370	10	2.7
1963-64	1656	1400	3	.2	526	400	5	1.2
Totals	8055	6509	41	0.6	2574	1787	39	2.2

Table 7
Homes of Reactors Completely Investigated: New Index Cases Located

	Grades				
	Two-Twelve	One			Totals
Year	1955-57	1955-57	1962-63	1963-64	
Homes Investigated	118	22	12	7	159
New Index Cases	1	1	2	0	4

in Negro children. In all age groups except 10 through 14 years, the male reactors slightly outnumbered the female.

Table 6 indicates the number of reactors detected in the first grades during the initial three years of testing and also for the school years of 1962-1963 and 1963-1964. It was felt that the students coming directly from prolonged close contact with their home environment might be dependable indicators for locating spreaders of tuberculous infection in the home.

Table 7 indicates the results of complete investigations of the homes of reactors and new index cases located in these homes. Some children came from homes where pulmonary tuberculosis had previously been found in an adult inmate who was now under medical supervision. These homes were not included in the tabulation. The home survey, which was carried out by the County Health Department, consisted of chest x-ray films of adults and tuberculin tests of children, followed by chest films of children giving positive reactions. Among 118 homes of reactors in grades 2 to 12 inclusive, one new index case was located, while investigation of 41 homes of first grade reactors revealed three such cases (Table 7). In all these adults (new index cases) acid-fast organisms were cultured on direct smears of sputum. Each received treatment which rendered him a non-spreader.

In order to secure a wider view of tuberculous disease among North Carolina children, the files of two clinics seeing sick children referred from all parts of the state were reviewed. These records covered a period of approximately ten years, ending December 31, 1963. The diagnoses included are listed in Table 8.

The largest number of children (32) suffered from tuberculous meningitis. This

Table 8
Active Tuberculous Disease From Birth To 15 Years Of Age Seen In North Carolina Memorial Hospital Pediatric Clinic and Gravely Sanatorium Contact Clinic 1952-1963

Tuberculous Disease	No. Patients
Abdomen, peritonitis	2
Bone	13
Cord, spinal	1
Ear	1
Endobronchial	2
Skin	2
Eye	2
Meningeal	32
Military	1
Node, superficial lymph	31
Pulmonary progressive, primary	17
Pulmonary, chronic reinfection	12
Pleura	7
Urinary tract	1
Total	124

probably is an overestimate of the true comparative incidence of this form of tuberculous disease since all patients suffering from it, unlike those with less acute conditions, are probably brought for hospitalization. In contrast, out of a large number coming for superficial lymphadenitis, 31 were designated tuberculous. All 31 gave positive tuberculin reactions, and some had node biopsy with cultures demonstrating acid-fast organisms.

Twelve children were found to have chronic pulmonary tuberculosis. Eight of the 12 were Negro girls ranging from 10 through 15 years of age. In their recent book Lincoln and Sewell[2] point out that the risk of chronic pulmonary tuberculosis in children is greatest during adolescence and greater for girls than for boys.

While it is generally accepted that in about 95% of child reactors the primary lesion is located in the lung, it is only when this primary lesion does not follow the usual benign course but progresses locally that the disease is listed as pulmonary progressive primary tuberculosis.

Summary

Between February, 1955, and February, 1957, a total of 15,479 Alamance County School children received intradermal injections of PPD-S (0.0001 mg). Of these, 2.5% were positive reactors. The number tested represented 87 per cent of the school students eligible for testing. In all groups the percentage of reactors increased with age. In each group the percentage was approximately two to two and a half times greater in Negro than in white children. There was a slightly higher proportion of male reactors than female, with the exception of those aged 10 through 14 years.

When compared with all other grades, investigation of the homes of first grade reactors produced a greater return of new index cases, although this experience is based on a relatively small sample.

Alamance County Health Department cooperated actively in an initial tuberculin survey of the county school children which afforded the incidence of tuberculous infection among these children. With this basic information the County Health Department is continuing annual tuberculin testing of all first graders and repeating tests of selected grades of non-reactors. Investigation of 159 homes of reactors revealed four new index cases, three in homes of first graders.

In a review of 10-year diagnostic files of two clinics seeing sick children from all parts of North Carolina, the tuberculous disease encountered most often was meningitis. Superficial lymphadenitis stood second among these diagnoses.

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Scientific knowledge of communicable disease demonstrated beyond any question the social aspects of individual illness, and the importance to one and all of a healthy common environment.—Alan Gregg in *Challenges to Contemporary Medicine,* Columbia University Press, 1956, p. 80.

Anonymous Mycobacteria (Group II Scotochromogens) As a Cause of Cervical Lymphadenitis in Children

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A group of acid-fast bacteria which superficially resemble *Mycobacterium tuberculosis* have been commonly called "anonymous" because our present knowledge is not sufficient to allow us to specify them. These organisms have been isolated from both sick and well human beings, and some of them seem to be saprophytic while others are pathogenic. This paper will discuss one variety of anonymous mycobacteria generally but briefly, and will describe a group of five cases of cervical lymphadenitis produced by this variety (Group II, scotochromogens).

The Organism

The anonymous mycobacteria have been divided into four groups on the basis of growth rate and pigment production in response to light[1-3]. These groups are as follows:

Group 1, Photochromogens (*Myco. kansasii*): Light exposure increases production of white or pale yellow pigment.

Group II, Scotochromogens: Light exposure does not increase production of yellow or orange pigment (scotodark).

Group III, Non-photochromogens (including the Battey type): Light exposure does not increase production of white to pale yellow pigment.

Group IV, Rapid growers (including *Myco. fortuitum*): Growth in two to five days; exposure to light does not affect pigment production.

All of these mycobacteria are separated from *Myco. tuberculosis* by their lack of pathogenicity for guinea pigs. Only group II will be further discussed; it is separated from the other three groups by its ability to produce yellow or orange-pigmented colonies when grown in the presence or absence of light.

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The scotochromogens are acid-fast rods which vary from 1.0 to 5.0 microns in length and very rarely exhibit cord formation. They produce yellow or orange colonies from the beginning of growth when grown in the presence or absence of light. The rate of growth is approximately the same as that of *Mycobacterium tuberculosis,* the colonies becoming visible in two to three weeks when grown at 37°C. The colonies are almost always smooth, and the cells are loosely arranged and unoriented. They produce large amounts of catalase, bind auramine and neutral red, but do not produce niacin. They rarely cause disease in guinea pigs or mice, and then only when very large inocula are used.

The source of group II organisms is of interest. Runyon reports that 75% of group II organisms kept in the "culture bank" were isolated from healthy patients who did not have tuberculosis or any form of pulmonary disease. These organisms are ubiquitous, and have been cultured from water and soil[4], indicating the need to sterilize all materials used in the preparation of specimens for tuberculosis cultures; even then, though dead, such organisms may conceivably still be seen in acid-fast smears.

Group II anonymous mycobacteria are distributed throughout the world. These organisms are isolated more commonly from gastric washings than from sputum specimens, and are rarely isolated from bronchial washings or lung tissue. They are cultured most often from patients under treatment for tuberculosis who have negative cultures for *Myco. tuberculosis* var. *hominis*[2]. The most likely explanation for this fact is that group II organisms are usually drug resistant and thus flourish in the bronchial tree of patients whose normal flora has been altered by broad-spectrum anti-tuberculosis drugs.

The Host and Host Response

Since scotochromogens are ubiquitous,

host "resistance" is a prime factor in the initiation of infections with these organisms. The scotochromogens are generally less pathogenic for man than are groups I and III anonymous mycobacteria, but more pathogenic than group IV. Runyon[2] concluded that group II organisms probably do not occur as independent pulmonary pathogens. They are, however, the most frequently encountered mycobacteria in clinical specimens, though usually not in significant numbers or consistently in the same patient[5]. They occur more commonly in patients with *Myco. tuberculosis* var. *hominis* under treatment, causing some workers to postulate that they represent "burned-out" mutants of *Myco. tuberculosis* var. *hominis*[6]. This argument has several flaws, the most important being the known existence of these organisms before the use of antituberculosis drugs.

The point of greatest interest is that scotochromogens are the only organisms which have been isolated in a large number of children with cervical lymphadenitis[7-19]. Jones and Campbell reported 162 such cases at the Royal Children's Hospital in Melbourne from February 1, 1960, to December 31, 1961[20]. They were able to culture mycobacteria from only 27 (36%) of these patients. From the 76 cases which were studied with both histologic sections and cultures, *Myco. tuberculosis* var. *hominis* was isolated from 12 and anonymous mycobacteria from 15. In 2 cases the anonymous mycobacteria were not identified, while in 13 they were chromogenic mycobacteria belonging to group II.

Patients with anonymous mycobacterial infections usually do not give a history of previous contact with tuberculosis. There is no evidence to date suggesting that this disease is transmitted from person to person, even within the patient's immediate family. Chapman[21] reported a group of 41 people in contact with 12 patients infected with and actively discharging group II organisms. Only four of these people reacted significantly (induration greater than 5 mm) on intradermal injection with group II antigen (PPD 236). Only two had reactions equal to or greater than those produced by any of the other anonymous mycobacterial antigens. There was no reaction to group II antigen alone; however, 8 of the 41 contactants reacted with greater than 5 mm of induration to human tuberculin.

The Disease

The clinical and histologic characteristics of cervical lymphadenitis due to *Myco. tuberculosis* var. *hominis* are well known and for that reason will not be reviewed here. In a single case caused by group II scotochromogens, the clinical and histologic picture is indistinguishable from that caused by *Myco. tuberculosis* var. *hominis*. In reviewing large numbers of cases, however, some trends are suggested. In lymphadenitis caused by scotochromogens there is a more rapid progression of symptoms and signs, lymph nodes becoming fluctuant within one to three months, as compared to three to six months in lymphadenitis caused by *Mycobacterium tuberculosis*. There is also a tendency for anonymous mycobacteria to affect a slightly older age group (7-13 year olds) as compared to one to six year olds for *Mycobacterium tuberculosis*.

Typical cervical lymphadenitis due to Group II, scotochromogens is exemplified in five cases from the North Carolina Baptist Hospital.

Cases with Positive Cultures for Group II, Scotochromogens

Case 1

A 2-year-old white male presented with an enlarged gland in the right submandibular area. No fever or other signs of systemic illness were present. The swelling subsided during a 17-day period in which an antibiotic (type unknown) was being given. About 9 days later, the node again became enlarged, with reddening of the overlying skin. It measured 5.5 by 3 cm, and was very firm and movable. A tuberculin test (tine method) was negative, and chest films were normal. The patient was then treated with a tetracycline (type unknown) for one month without change in the mass except for further induration, skin erythema, and fluctuance. Approximately two months after the initial visit, incision and drainage of the swelling produced liquid pus and some flecks of solid material from the graytan, necrotic node. The lesion was packed with iodoform gauze, and the administration of isoniazid (INH), 10 mg per kilogram (150 mg) daily, was begun.

Material submitted for histologic examination was not satisfactory for study. Direct acid-fast

smears (Pooman's stain) revealed one acid-fast bacillus. Acid-fast smears from the concentrated material showed rare acid-fast bacilli which were "questionably atypical." Gram-stained smears were negative, as were general cultures and cultures for fungi and yeast. Acid-fast cultures grew many colonies of group II scotochromogens, which were resistant to streptomycin but sensitive to para-aminosalicylic acid (PAS) and high concentrations of INH.

When the patient was seen again about one month after the operation, the area was still draining. In addition, another node anterior to the first had begun draining spontaneously. The exudate again showed acid-fast bacilli on smears and produced many colonies of scotochromogens on culture. The patient was advised to continue INH. The surgeon and the pediatrician advised re-admission for total excision of the lesions, but the parents did not bring the child back and he has not been heard from since.

Case 2

A 3-year-old white girl had an enlarged node over her left mandible which was sometimes tender and varied in size. She was treated for 14 days with penicillin. Skin test with old tuberculin (OT) 1:2000 was positive. This test was repeated, along with a Vollmer patch, and reactions to both were positive. Chest roentgenograms were negative. There had been no exposure to tuberculosis.

On admission the patient was afebrile, and physical examination was within normal limits except for a firm, nontender, movable node, measuring 3 by 4 cm, over the left mandible. There was no other adenopathy. The hemogram and urinalysis were within normal limits. X-ray studies were repeated, and views of the mandible disclosed no calcification.

A necrotic liquefied group of cervical lymph nodes on the left was excised. Histologic sections revealed "chronic granulomatous lymphadenitis with foci of necrosis." Gram-stained smears were negative. General and fungus cultures were also negative. Acid-fast smears revealed rare acid-fast bacilli. Cultures for mycobacteria grew scotochromogens.

The patient was given INH, streptomycin, and pyridoxine while in the hospital. She was discharged with directions to continue taking INH and pyridoxine for six months. When last seen, the incision was well healed.

Case 3

This patient was a 4-year-old white girl whose chief complaint was left submandibular swelling of six weeks' duration. A recent febrile upper respiratory infection had been treated for one week with tetracycline by the family physician, who gave her oral penicillin one week later because of lymphadenitis. There was no improvement. The patient was referred to the North Carolina Baptist Hospital at the end of five days of penicillin therapy.

There was no history of tuberculosis in the family. The physical examination was within normal limits except for left submandibular swelling associated with a firm, freely movable, non-tender mass, measuring 5 by 7 cm. There was no erythema or other discoloration. Hemogram, urinalysis and chest x-ray were normal. Roentgenograms of the mandible did not show decalcification. Results of skin tests read at 48 hours were as follows: purified protein derivative (PPD) intermediate strength, 11.5 mm induration; PPD-Watson (group II), 23 mm induration; Battey PPD (group III) antigen, 15 mm induration; PPD M.phlei; (a cross reactant with group IV organisms), 6 mm induration.

A mass of matted, necrotic nodes was excised from the left submandibular region. Histologic sections revealed chronic granulomatous lymphadenitis with caseation necrosis. Gram-stained smears disclosed no organisms. General and fungus cultures were negative. Direct acid-fast smears showed rare acid-fast bacilli. Concentrated material also showed rare acid-fast bacilli. Many colonies of scotochromogens were grown on the appropriate medium. The organism was sensitive to mixtures of streptomycin and PAS, as well as to viomycin and the higher concentrations of cycloserine. It was resistant to both streptomycin and INH administered singly or together. Before sensitivity studies were completed, the patient was discharged on a regimen of INH, 20 mg/kg daily. The wound healed well.

Cases Probably Due to Group II Oragnisms

Case 4

This 4-year-old white girl had manifested right submandibular swelling for four to five weeks prior to hospitalization, initially attributed to exposure to mumps. When the swelling did not regress, she was taken to the family physician who treated her unsuccessfully with sulfonamide drugs. The patient also had low grade fever (101-102°F), and anorexia, with a 2-pound weight loss.

Physical examination was within normal limits except for carious teeth and a firm 5 by 7 cm mass in the region of the right temporomandibular joint. The overlying skin was erythematous, and there was slight central fluctuance. Roentgenograms showed evidence of an enlarged lymph node in the right hilus. Films of the neck revealed no calcification in the mass or bony reaction. Skin tests with histoplasmin, blastomycin, coccidioidin and cat-scratch antigen were all negative. Reaction to intermediate-strength PPD was positive. The hemogram and urinalysis were normal. The antistreptolysin 0 titer was 166 Todd units. The C-reactive protein was 4 plus with 4

mm of precipitate. Throat cultures grew normal flora.

The thick, yellow, odorless material aspirated from the lesion showed no organisms by gram-staining. General and fungus cultures were negative. Acid-fast smears showed rare atypical acid-fast bacilli. Mycobacteria were not grown from cultures.

INH and pyridoxine were prescribed and the patient was discharged. Six days later the lesion was still draining. The mass of nodes was then removed. Histologic sections were found to contain granulomatous lymphadenitis. Acid-fast smears revealed rare "atypical acid-fast bacilli." There was no growth from acid-fast cultures. The patient was discharged again with orders to continue taking isoniazid and pyridoxine. The wound healed without further difficulty.

Case 5

A 2-year-old white girl had a mass in the left side of the neck, persisting despite administration by her family physician of "antibiotics" for a "short period." No systemic symptoms or other complaints were noted. The physical examination was within normal limits except for a 6 by 4 cm mass in the left side of the neck at the angle of the mandible. Hemogram and urinalysis were normal.

Intermediate-strength PPD produced induration to 4 mm; PPD-Battey (group III) antigen, 12 mm; PPD-Watson (group II) antigen, 11 mm; PPD-phlei antigen, no reaction.

The mass was excised. Histologic examination revealed granulomatous lymphadenitis. Gram-stained smears did not show organisms, no acid-fast bacilli were seen on smears, and cultures showed no growth. Inoculated guinea pigs manifested no gross evidence of disease after eight weeks.

The patient was discharged on a six months' regimen of isoniazid and pyridoxine. Recovery was uneventful.

Discussion

That scotochromogens were not recognized long ago as a cause of cervical lymphadenitis in children is due primarily to laboratory error. Until recently these organisms were not even mentioned in laboratory reports. As laboratory personnel became more familiar with the mycobacteria, they were reported as "chromogenic saprophytes." More recently, many laboratories have attempted at least to classify them according to the Runyon schema. It is obvious to those who work with these organisms that this classification is not adequate, but it is consistent with our present limited knowledge. More specific laboratory tests are being reported continually, and should help to characterize the anonymous mycobacteria[22-34] more accurately.

At some future date it may become clear that the organisms of group II which cause cervical lymphadenitis in children differ substantially from the remainder of the group II organisms. It is obvious that the only means of establishing the pathogenicity and characteristics of these organisms is through tests that will make a definitive differentiation possible. This becomes of more than academic interest because of the differing infectivity of group II mycobacteria and *Myco. bacterium tuberculosis* var. *hominis*.

It is evident that a histologic examination is necessary, not only to determine the type of lymphadenitis, but also to rule out neoplasia which must be considered in the differential diagnosis. In the five cases here reported, stains of the tissue sections did not disclose acid-fast bacilli. Jones and Campbell[20] found the use of the fluorescent auramine-rhodamine dyes more effective than conventional methods in finding acid-fast bacilli in the issue sections. They were able, by this method, to demonstrate bacilli in all nodes from which a Mycobacterium was isolated. However, they were not able to distinguish the anonymous mycobacteria from *Mycobacterium tuberculosis* var. *hominis*. One must remember that false positive results with the auramine-rhodamine technique are not infrequent. For this reason, our laboratory employs Gilkerson's modification, which utilizes ferric chloride to block or reduce most of the interfering substances[35, 36]. This technique was used in our laboratory on direct smears and smears of the homogenate, but was not used on the tissue sections.

Jones and Campbell consider that they can distinguish the histologic picture of lymphadenitis caused by anonymous mycobacteria from that caused by *Myco. tuberculosis* var. *hominis*. These workers separated their cases into two groups: (A) the so-called "typical" cases, which had the histologic characteristics seen with *Myco. tuberculosis* var. *hominis* infection, and (B) the "atypical." Atypical cases had one or more of the following characteristics: "(1) the

presence of basophilic nuclear debris (or whole polymorphonuclear leukocytes) in the central area of caseation, which was separated from an outer zone of epithelioid cells by a narrow band of usually caseous tissue; (2) the absence of giant cells, or presence of atypical giant cells of the foreign body type; (3) a zone of vascular edematous epithelioid granulated tissue densely infiltrated with plasma cells and lymphocytes; (4) the absence of caseous material." In this series of 124 cases, there were 21 positive cultures reported from a total of 76 cultures taken. Eight of 84 cases with a "typical" histologic picture grew *Myco. tuberculosis* var. *hominis*. Cultures in 13 of 40 "atypical" cases grew scotochromogens[20].

Four of the cases in the present report were interpreted by the pathologist as representing granulomatous lymphadenitis. No attempt was made to classify our cases further. The other specimen (Case 1) was not satisfactory for examination. If the histologic distinction proposed by Jones and Campbell can be made, it will be of additional help, especially in cases where cultures are negative; many pathologists are skeptical about the matter.

Because of several reports contending that the histologic picture associated with Battey infections could be distinguished from that caused by *Myco. tuberculosis* var. *hominis*, an interesting study was conducted with group III (Battey) organisms[37]. Sections of tissue with granulomatous reactions were sent to different pathologists, who were asked to distinguish those reactions due to Battey infections from those due to *Myco. tuberculosis* var. *hominis*. All of the tissues submitted came from patients whose diagnosis had been proved by culture. It was interesting to note that when pathologists ventured a guess, they were more often wrong than right. These authors concluded that such a distinction could not be made.

Even if a histologic distinction can be made between the group II organisms, it should never be the basis for a final diagnosis. It is extremely important that the following procedures be carried out on the material excised from these nodes, since culture of the causative organism is still the only substantial method of etiologic diagnosis.

First the material should be examined grossly and representative sections taken aseptically and placed in buffered formalin. The remainder of the uncontaminated tissue should be submitted to the microbiologist in in a sterile container. The specimen should be homogenized aseptically by use of a tissue-grinder or blender using saline, water, or an enzymatic digestant such as sterile Seitz-filtered pancreatin. From this homogenate, gram-stained and acid-fast smears, cultures on ordinary media, cultures for fungi and yeast, and cultures on appropriate media for mycobacteria can be made. The remaining material is then decontaminated with sodium hydroxide to remove bacteria other than mycobacteria, and neutralized with hydrochloric acid. This decontaminated homogenate is then concentrated, smeared, and cultured for mycobacteria.

It has been our experience that anonymous mycobacteria grow faster from the untreated material than from the decontaminated homogenate. Indeed, often no growth is seen on the treated sample. The different mycobacteria vary in their pH tolerance. The saprophytes grow well through the widest range of pH, followed by group III, group I, group II and finally *Myco. tuberculosis* var. *hominis* (H37Rv) which demonstrate the narrowest tolerance range[38]. Culture media should be inoculated in pairs, so that one tube may be wrapped in foil to exclude light when scotochromogens are suspected. This procedure will save two to three weeks in the process of final identification. A guinea-pig inoculation should be done on all specimens. This is not absolutely essential for the positive identification of scotochromogens, but it will save from six to eight weeks in diagnosis if a question should arise concerning the identification of the organism isolated.

Skin tests with tuberculoprotein have received considerable attention in the diagnosis of these infections. Four of the patients in this report showed some degree of induration to PPD-S (purified protein derivative of *Myco. tuberculosis* var. *hominis*) intermediate strength. Three were 10 mm or greater, and one was 4 mm. In Case 1, in

which the PPD-S gave negative results, the Tine test was used. Now that skin test antigens for anonymous mycobacteria are more readily available for general use, they should be considered a necessary part of evaluating any patient with cervical lymphadenitis. However, further investigation is needed before the results can be applied to clinical medicine with the same meaning as the results of PPD-S[39, 40]. It is obvious that there is a great deal of cross-reaction which makes cultural diagnosis essential for proper interpretation of the test results.

Skin tests have presented evidence that there may be a relation between cervical lymphadenitis and cat-scratch disease[41]. Scotochromogens have been isolated from patients with this condition on several occasions. The largest series of anonymous mycobacteria which have been isolated in such cases was reported by Boyd and Craig[11], who isolated photochromogens from seven patients and scotochromogens from one. The diagnosis of cat-scratch disease is made by excluding all other causes of lymphadenitis and by obtaining a positive reaction to the cat-scratch antigen.

Until better techniques for the recovery of mycobacteria are used, it will be difficult to answer any questions concerning the relationship of these two entities. It would therefore seem logical that any patient with cervical lymphadenitis of unknown cause should be tested for cat-scratch disease as well as evaluated for mycobacteria. For the same reason, the diagnosis of cat-scratch disease should not be made unless a biopsy is first taken and mycobacteria excluded by the previously outlined methods. Special emphasis should be put on the microbiologic examination of the excised nodes, since the histologic picture of the two entities is similar.

No complications peculiar to excisional biopsy of cervical nodes infected by anonymous mycobacteria have been reported. Two of the patients in this report manifested a slight weakness of a branch of the seventh cranial nerve post-operatively. Both children were improved or normal within two weeks after operation. Anti-tuberculosis drugs should be started as soon as the diagnosis is made in order to prevent the formation of sinus tracts or hematogenous spread after operation[14]. The question of what drug to use before sensitivity studies are available, or of how long to continue antibiotic therapy cannot be answered. The five patients in this report were treated with INH and supplemental pyridoxine. Streptomycin is probably not indicated because of its long-term toxicity and the usual lack of sensitivity of the organism to this drug.

Summary

A brief review of the pertinent literature on cervical lymphadenitis in children caused by anonymous mycobacteria (group II, scotochromogens) is presented. Five instances of cervical lymphadenitis from the North Carolina Baptist Hospital case records are reported. In three cases cultures positive for scotochromogens were obtained. The remaining two patients presented presumptive evidence of infection by these organisms. The clinical picture in all five cases was very similar and could not be distinguished from cervical lymphadenitis due to *Myco. tuberculosis* var. *hominis*.

The methods of diagnosis are stressed because of the need for further information about these infections and the mycobacteria which produce them. The possible association of this disease with cat-scratch disease is mentioned.

Treatment of choice appears to be surgical excision of the infected tissue, followed by the administration of anti-tuberculosis drugs to prevent hematogenous dissemination or the formation of draining sinus tracts. The disease has a good prognosis if treated properly. The diagnosis can usually be made and appropriate treatment instituted if patients with cervical lymphadenitis of unknown etiology are subjected to excisional biopsy.

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Our own insecurity in life's varying probabilities provides the wry humor of Samuel Butler's observation that the art of living consists of being able to form adequate conclusions from inadequate evidence.—Alan Gregg in *Challenges to Contemporary Medicine,* Columbia University Press, 1956, pp. 83-84.

Mental Health Programs in Small Cities

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North Carolina, known as a rural state, has a population approaching five million which is so dispersed over the entire land space that perhaps no more than 900,000 of its people reside in metropolitan communities of 5,000 or more population. This fact has an important bearing on the development of the mental health program in this state.

Historically, the "Good Health Movement," instigated by Governor Melville Broughton's Health Commission of 1943-1944 and known as the Poe Health Study Commission, was confronted with a variety of problems relating to public health and medical care. From these confrontations certain priorities were established, based on the criteria defined by the study. Among them, mental illness was given prominent, though not equal, place with such priorities as the extension of public health facilities and services, hospital construction, voluntary health insurance, and the expansion of education facilities and services in medicine and the ancillary professions. The result was legislative action to reorganize existing systems, provide adequate support for state mental institutions and services, and make some provision for local services through the expansion of public health activities and the financing of mental health clinics.

This legislation, when implemented in the early 1950's, resulted in statewide improvement of the mental health program in both quality and quantity. It failed, however, to emphasize the preventive services afforded by new techniques, and largely ignored the involvement of private physicians in the program, despite a growing tendency to recognize mental illness in its incipiency and approach it, basically, at the community level.

The General Assembly of 1961, however, authorized a Commission to Study the Reorganization of State Government and, in reporting to the Governor in 1962, recommended the consolidation of all mental health activities into a single Department of Mental Health, including local facilities and services. At this point new questions of criteria and priorities arose. The Medical Society became aware of the matter during the authorization of the 1961 General Assembly and grew more sensitive to the responsibilities for mental health in the private practice of medicine. Through both its Committee on Mental Health and the Committee on Legislation, it studied the matter and offered consultation throughout the course of the reorganizational studies and on into the drafting of implemental legislation to be offered to the General Assembly of 1963.

The State Society became particularly sensitive to the role of the nonpsychiatric physician, and successfully modified the legislative action so that the 1963 Mental Health Act recognized this important principle: that for the present the expansion of mental health must extend to the county and community, and that private practicing physicians must be involved in the planning and operation of local and state mental health services.

With these principles established into law, it then behooved medical leadership to take up its role within private practice and move on with the forces of implementation. To this end the Medical Society chose certain priorities which do and will deeply affect the mental health program in North Carolina. The priorities were:

1. Physician education (on mental health activation in private practice).
2. Public education (to accept mental health service, to seek it, and to collaborate with private practice in this process).
3. Children's services (stressing their importance in all geographic levels of service and programs).
4. Alcoholism (emphasizing that this is a disease and must be dealt with at all levels of mental health activity).

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5. Medicine and religion (educating the "Doc and Frock" to the potentials in their collaboration on and understanding of mental health problems and service programs).

Each of these priorities is now the object of an organized, committee-directed effort in the State Society. These committees are hard at work and have to their credit a hard core of achievement at the state level. Moreover, 80 per cent of the counties have similar committees which are engaged in this effort at the county and community level. Each of these priorities will involve the education of paramedical or ancillary personnel involved in mental health at all levels.

The following statewide developments are reported:

1. A Medical Advisory Committee to the State Department of Mental Health, composed of physicians nominated by the State Society is now operating, and has been departmentalized to encompass divers activities of the Department and assignments made by it.
2. The one hundred counties of the state are encompassed by 75 component county medical societies, all of which have commitees on mental health. The committees represented in the 79 component societies now extend to 99 counties—to wit, there are 99 county medical society committees on mental health.
3. Twenty-five counties have mental health councils in operation.
4. Twenty-seven county medical societies have subcommittees on mental health and religion.
5. Twenty-seven county societies have a children's service with a subcommittee related to mental health.
6. Twenty-seven county societies have a subcommittee on physician education under the committee on mental health.
8. Twenty-seven county societies have a subcommittee on alcoholism under the committee on mental health.
8. Twenty-seven county societies have a subcommittee on public education under the committee on mental health.
9. Local physicians are progressively participating in evening training conferences conducted by psychiatrists from teaching centers and are applying this instruction to mental patients encountered in their private practice.
10. The medical staffs of the state mental hospitals are providing consultation to private physicians to whom patients have been discharged, in regard to essential therapies instituted in the hospitals. This effort is bringing practical knowledge of new methods of treatment to the level of private medical practice and is showing remarkable results in the reduction of readmissions to the State mental hospitals.

Conclusion

It is believed that the concepts underlying the criteria and priorities cited in this presentation are finding practical application throughout the state, and that these processes are conditioning the private practitioner for the advent of county mental health facilities in a manner to result in the coordination and integration of private medical practice in new areas of mental health activity.

In order to learn something vividly you should be in the minority and, thus, overpowered as well as informed.—Alan Gregg in *Challenges to Contemporary Medicine,* Columbia University Press, 1956, p. 15.

Medicine in the Pioneer West – 1850-1900

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It is difficult to survey a period which presents so diversified a picture of a people in motion as that of the American frontier in the last half of the 19th century and, from the survey, to derive any consistent set of principles which guided the nation as it pushed west. The situations which confronted the pioneer families were as new to them as was the land itself. Yet their adaptation to the new existence had to be immediate and effective if they were to survive, for there were few second chances. The frontiersman had to do with what he had, whether in gold-panning, trapping, ranching, or building a home. In most cases, even his medical needs had to be met by himself, and it would be foolish to suppose that medicine on the western frontier was limited to the few doctors who happened to be available, or even to people with a modicum of experience in nursing. Therefore, any effort to show the type of medicine available to the people of those times must include not only the care provided by physicians, but also the simple home remedies used, quackery, and the practice of midwifery; and it is here that we will first focus our attention.

Combatting the Doctor Shortage

When considering domestic medicine on the American frontier, the historian should keep at least two generalities in mind. In the first place, no one died but once. Infections of all sorts took a heavy toll, and the Colt revolver and Winchester rifle were all too effective in eliminating the need of a surgeon. Two prime examples were the sudden death of Wild Bill Hickok (1876) in South Dakota at the hand of Jack McCall, and six years later the similar passing, in Missouri, of Jesse James. "Mr. Howard" was shot in the head by two of his henchmen, Charlie and Robert Ford[3].

Secondly, we must understand that natural selection operated to make the American pioneer a pretty tough organism[5], but when he became sick the pioneer treated himself. In many cases this was better so, for he did much less damage with his mild carthartics than the physicians did with powerful blisters, massive purges, and repeated bleedings. He occasionally reverted to the Indian's magic, for we see frequent reference to certain spells, incantations, mad stones, and snake stones.

Of greater importance, however, was his reverence for the healing powers in plants, and we may assume that nearly every green plant and fungus at one time was used in a homemade sirup. A kitchen was not complete without oak of Jerusalem, hyssop, lavender, purple aster, and bluet (venereal disease[12]), thyme, rue, and sweet bugle. The names of several reveal their use—*feverfew, fleabane, boneset.* To spice up the brew, agents were added for their terrible taste and sickening odor; thus yellow poplar, sumac, tansy, pokeberry, jimson weed, red peppers, and dogwood. And naturally no concoction was complete without at least one of the panaceas, sassafras oil or goose fat. If they served no other purpose, these plants added vitamins to an otherwise deficient winter diet.

But we can't be too hasty to condemn, for drugs such as quinine, cocaine, ephedrine, reserpine, and mescaline have evolved from this helter-skelter assembly. Indeed 60 old remedies are still listed in the U. S. Pharmacopoeia (1955) including soporifics, cathartics, emetics (which our forefathers called "pukes"), and abortifacients[5], and when his wordly cares really began to tear him asunder, we find these folk of a century ago resorting to a medicinal still in world-wide use today. A statement in a recent "What's New" clarifies the point:

> . . . and the historian acknowledges that the American pioneer had in abundance one profound medical sagacity: he knew the virtue of *Spiritus frumenti.* He left the making of medicinal wines to his wife and she made them from many fruits and berries, some very surprising, such as elderberries, pokeberries, coke cherries, wild plums and sarvis berries. She also flavored with fruit extracts the spirits he turned over to her, and thus made cordials which were obviously better than the wines

for therapy. But he made the spirits. Rye whiskey and the corn liquor that was to evolve into bourbon were his permanent triumphs, and in the Southern highlands and a good many other places they are made today just as he made them. But, also, he made applejack of high amperage and he made brandies, genuine brandies, from many other fruits. One of these, peach brandy was a great glory of American culture. That it has all but disappeared is a national tragedy.

Unquestionably, these products were the more reliable of frontier remedies. Over the decades they soothed an incalculable number of bodily and spiritual afflictions. The midwestern pioneer was continuing a tradition which began at Jamestown and Plymouth and which one would not like to see weakening in American medicine[5].

Midwifery

Another area in which these resourceful folk were singularly successful was, of course, midwifery. For example, a woman in Jackson, Wyoming, recorded that her grandmother delivered over 1000 babies. In addition to their obstetric duties, the settlers' wives who possessed a special aptitude for nursing took care of most of the sick. They usually went horseback, and in the early days were paid in goods, not money, as the latter commodity was scarce. Several records reveal that the payment for midwifery services was one cow and one calf. One woman is reputed to have been good at setting bones[12].

Although there are numerous references to the existence of midwives in the late 1880's, there are few details concerning their actual duties. It is assumed that until the advent of physicians in numbers, the midwife did little more than assist the natural process. After physicians began to enter the field, however, the midwives, not to be outdone, started to carry douche bags and as soon as delivery was completed, a vaginal douche of carbolic acid or bichloride of mercury was given[19].

Common Practices—Professional and Otherwise

Turning briefly from the homesteader, let us examine a few other situations into which the physician was rarely called. The wagon trains were rolling westward during this time, and various accounts tell of the ravages of typhoid fever, scurvy, smallpox, cholera, and tuberculosis, as well as occasional gun-shot wounds and the ever present possibility of Indian lances and arrows. In these cases the traveler preferred treatment by experienced fur traders and even the Indian medicine men. Also, the buffalo hunter and Indian scout, by nature adventurous souls and well indoctrinated into the the perils of the trial, were looked to for assistance.

Excepting the cases where these men were available and the rare situation in which a physician could be reached, it would be only futile to speculate upon the type of aid the sick received. However, it might be well to mention a few specific diseases and the methods commonly used in handling them. Anytime the old timers came to town for their periodic grubstake, the grocers were prepared, for there was an almost universal "grocery list." Nine times out of ten it consisted of 50 pounds of superfine flour, 50 pounds of fat pork, 10 pounds of coffee, 20 pounds of sugar, and salt.

It is not surprising, then, that each winter saw a rise in the incidence of scurvy. And while medical science prescribed lime juice and dried fruit for its treatment, the backwoodsman had other ideas:

Panther meat, then beaver tails boiled, unborn buffalo calves before they hair over, rattlesnakes like a long chicken neck only thinner, skunks, and goats. Then there is buffalo, I mean the whole critter, mind you, barring hide, hair, horns and hoofs. Red muscle meat will do you in the settlements, maybe, or where you can get plenty of greens and vegetables. But on the prairie you will have the cows' insides for choice marrow, lights, heart and tongue, warm liver spiced with gall, and best of all, guts—plain guts—and raw at that[19].

Surgical Procedures

In the field of surgery, from South Dakota comes a story that is probably typical of the rural situation. During a rather wild party in the 1880's, a rancher received a bullet in his leg. It was amputated by two "doctors" who were at least good at prognosis, because they were not sure that he would live. They sent the patient to Sioux City, Iowa, where he died three days later. It developed that

the two "doctors" were the local druggist and barber[6].

But for all the sincere efforts of these early citizens, there always existed the few fly-by-nighters whose efforts were rarely honorable. Again we will not try to generalize, for methods of extortion were limited only by the imagination of these men. However, a reference to an advertisement in a Texas newspaper in the mid-1800's should serve to point out the problem:

> Persons living in the country may, by sending a statement of their complaints, have remedies forwarded to any part of the country by making a remittance[17].

From Medicine Man to Scientist

Before turning our attention to the physician of the latter half of the 19th century, it might be well to consider briefly the laws governing medical practice, the educational system of the times, and the beginnings of organized medicine in the West.

Actually quite early, both the physician and the lawmaker realized the need to control the quality of physicians coming west. In California (1856) a state society was founded by 76 physicians for the express purpose of protecting the public health and promoting the science and art of medicine, and in 1876 a medical practice act was approved by the governor[7]. One year earlier, a law was passed in Nevada making it necessary for the physician to exhibit his diploma to the county recorder before he could open his practice. Violations carried a fine of not less than $50 and not more than $500 or up to six months in the county jail. Incidentally, the person making the arrest could pocket the fine[11].

In 1885 these three questions appeared on an examination for licensure for the territory of North Dakota:

1. Given a case of diphtheria, what precautions would you take to prevent its spread?
2. What is a case of puerperal septicemia?
3. What is a case of typhoid fever?[9]

For his training the would-be physician in 1858 could go to San Francisco, where two courses of 18 weeks each were required for graduation. The first medical school in the Pacific Northwest was established in Salem, Oregon, in March of 1867, and in July of the same year graduated the first class of three. In 1876 for the "best," one went to Pennsylvania Medical School. Lecture tickets ($20 each) were purchased for the seven courses required per year. A two-year stay was required for graduates, while a third year was added in the 1880's. Upon graduation the young doctor possessed a diploma in a tin case, a stethoscope, and a 12-inch thermometer. Other schools required two yearly courses of five months each, followed by two or three years of apprenticeship or preceptorial training with a practitioner (1885). Of course, should these studies prove too much of a burden, a diploma could always be purchased from the Buchanan School in Philadelphia!

Scientific Advances

As for the physician himself, he was at last becoming a real scientist. The nineteenth century saw him begin to take his place at the bedside of the patient. The sorcerer and priest of ancient days were gone, and the astrologer and chemist of the fifteenth century were fading.

This is not to say that he had given up his apothecary, however, for medical school courses were still largely concerned with *materia medica*. And although bloodletting of the seventeenth century and the academic philosophers[23] of the eighteenth century were largely disappearing, medicine still had a long way to go. The theory of disease as caused by microorganisms was two centuries old, but no one really took it seriously at midcentury. There were no laboratory facilities for diagnosis or therapy. The generalized theories of pathology (Benjamin Rush) were now in vogue, ascribing disease to the tone or general state of the patient's "system," rather than in terms of structural, localized pathology[21].

But these 50 years saw tremendous strides being taken in all fields. Anesthesia at least was being considered in 1850, and organized medicine had been given a firm footing, for the American Medical Association had met for the first time in 1846. The ophthalmoscope was introduced in 1851, and in 1860 Pasteur announced the presence of bacteria in the air. In 1870 came the fever thermometer, and four years later Ehrlich

had demonstrated new techniques for the staining of blood. Scurvy was described by Sir Thomas Barlow in 1875, and from England came the announcement of the first portable bath tub in 1876. Two years later came the sphygmomanometer, and in the 1880's Pasteur discovered streptococcus, pneumococcus, and had developed a vaccine for anthrax. In 1890 there were 166 medical schools in this country, and attempts had been made to standardize the length of study at a minimum of three years of six months each. And in 1895 came x-ray[7].

Heroes of the Sage

It would be impossible to say just how much of the current medical knowledge was available to the pioneer. The West offered countless opportunities for the adventurous doctor, and doubtless many of the physicians in the larger towns represented ambitious young men from the best medical schools in America seeking a place in this growing America. Therefore, in many cases scientific progress and good care for the pioneers traveled hand in hand[19]. In addition to these men, many surgeons who had been assigned to the Pacific Coast during the Civil War remained there afterwards. Others, released from the army at the close of the war, went west[14].

But just as in the case of the homesteader, the physician had to make the best of what little equipment was available to him. Certainly the very latest in instruments was obtainable:

> Surgical instruments were beautifully hand-carved of the finest steel, and after use were usually washed and dried on a piece of old chamois leather to keep them from rusting. They were equipped with beautiful chased ebony or ivory handles, and were kept in a velvet lined mahogany box, all together a fine breeding place for bacteria. It has been said that the old family doctor frequently had a splotch on the right side of his pants, where for years he had wiped his lancet after opening a whitloe or an abscess. Then he laid it on the table and forgot it or, if it happened to be one of those pretty, convenient pocket lances, shut the blade into the handle, put it into his pocket and was ready for the next unfortunate[13].

The country doctor all over the West was improvising. For example, in Utah in 1894 it was decided to operate on a 35-year-old woman suspected of having a large ovarian tumor. Since there were no hospitals, a room was prepared in the home of a relative of the doctor. The operating room and marine sponges were readied as follows:

> I . . . washed the sand out with warm water, then put them (sponges) in a jar of permanganate of potash solution for 48 hours, washed them in water, then in oxalic acid solution . . . then in a jar of 5% carbolic acid solution until they were ready for use.
>
> The operating table was a pair of carpenter trestles with boards on them and blankets on the boards and a boiled sheet over it all. The sheets used to drape the patient were boiled and then immersed in bichloride solution and put on the patient still wet. The abdomen was prepared the day before, a wet bichloride dressing being applied[19].

Chloroform was used as an anesthetic and a 42-pound tumor was removed successfully. Chloroform was not always available, however, and we read of other cases where salt and powdered ice were applied in a thin cloth over the abdomen of a woman before an operation to remove an abdominal abscess. This woman too recovered.

> Soon after I located in Dodge City (1880), my practice began taking me in all directions and into the adjoining counties. Visits were from one to fifty miles distant, and these journeys had to be made by horse and buggy or on horseback[4].

This simple statement illustrates the type of practice which was to concern most doctors of the new West. Often the trip to the home of the sick person was filled with more adventure than was bargained for. In 1880, in Dodge City, Kansas, Dr. S. J. Crumbine was approached by a cowboy from a ranch 35 miles away with a request for help. As a result of an argument with a bronco, the foreman was urgently in need of surgical attention. Many hours later the injured man was reached by horseback and a simple fracture set. The rancher, however, fearing for his life, forced the doctor at the point of a Springfield rifle to stay over night and well into the following day[4].

Another physician caught without his instruments reports the amputation of one arm of a patient on a wagon train:

> A skinning knife was whetted to razor sharp-

ness. One of the teamsters brought out an old rusty handsaw from his tool box and the back of this was filed to a fine set of teeth. A small fire was built and the king bolt of one of the wagons laid upon the coals to heat. When all was ready, they placed the patient on his back on the grass and a dozen men held him fast while the amateur surgeons went about their terrible deed of mercy.

A tourniquet prevented bleeding. The whetted knife quickly opened the arm to the bone. The bone was immediately sawed off. The white hot bolt seared the raw stump, taking up the arteries better than ligatures could have done had there been any. Then a coating of cool axle grease was laid over the wound and covered with improvised bandages. The patient was carried to his bed in the shade of the wagons. Next day the caravan moved on. His arm healed rapidly, and long before they reached Santa Fe the patient was sound and well[18].

Office hours? In most cases the doctor was called at any time and for about any situation.

There were no telephones; and when a doctor was needed badly, some neighbor got on his horse and came to town. He was cold and wet when he got in and usually took a few drinks to keep the cold out on the road back. The doctor saddled his horse, threw on the old saddle bags, a satchel over his shoulder for instruments, etc., then took off into the storm, rain, sleet or snow, and night. Dark? One could not see his horse, let alone the road, plodding along through sloppy mud, over endless corduroy, then more mud, then a narrow trail with wet ferns horse-high, sometimes absolutely lost even when the man went back with you, then on 'till a little cabin is found. A shout, a sleepy half-dressed man or woman, and maybe you have gone five miles too far. Turn back and search the black walls on the sides of the road for a little opening where the trail comes in. You finally get there, a little shack in the clearing.

No doubt or question as to your patient being sick, mighty sick, or they would not have sent for you. They had tried everything they knew, consulted the family doctor book from to cover. Now it's up to you to see him once or twice and cure him. If it's an operative case, don't for a moment think hospital. "There ain't no sich." Get out your anesthetic and instruments and operate under the soft light of a guttering candle or a sawed-off lamp. And for the after care? Well, for a few days at least he will not care for food. After that he goes back to the old diet, flap jacks, sour dough and the rest of it. Probably not a dollar in the house. You'll get it though, all of it, every cent cent, sometime[13].

Conclusion

And so the nineteenth century doctor lived. A busy man who had to be ready to treat almost every known ailment of mankind. And where is this great friend today? Long gone, for he died with the era that made him the great citizen we remember. Many will say it is best so, best to forget the myths and inadequacies of the past and look to a bright future in the healthiest country on the face of the globe. But many of us deeply regret his demise, and would say, "God bless him and rest his tired old bones."

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Case Reports from the Committee on Cancer

This is the first in a series of case reports by the Committee on Cancer, each of them illustrating a point in which the diagnosis and treatment of cancer could be improved. The nature of the reports is such that the identity of all indviduals and institutions involved will be concealed, but the facts are given as they occurred.

* * *

The patient, a 51-year-old man, entered the hospital on August 31, 1952, complaining of weakness, easy fatigue, and shortness of breath.

He had been relatively well, but for about a year had noted increasing weakness, easy fatigue, drowsiness, shortness of breath, palpitation, and occasionally some chest pain on exertion. Associated with these symptoms he had known intermittent depression, and attributed his lack of well-being to overwork. Finally, about three weeks prior to admission to the hospital, he went to his physician and was found to have a hemoglobin of "30%." He was given a pint of blood intravenously and ten "liver shots" over a three-week period. He was also given some capsules which he understood to contain iron. Following that he began having black stools, and on one occasion thought he had a red stool, although he had eaten watermelon shortly before going to bed the night before.

For editorial comment see page 168

The patient failed to improve on this treatment and was sent to the hospital for further studies. He denied having any epistaxis, hematemesis, hemoptysis, melena, or rectal bleeding. He had no fever, chills, or enlarged lymph nodes, and had no tendency to bruising or bleeding. There had been no jaundice, no change in bowel habit, and no mucus or pus in the stool.

His general health had been good except for the usual childhood diseases. At the age of 15 he had a hernia repair. Off and on for several years he had noted an occasional blood stain on the toilet tissue, "due to a small hemorrhoid," but no frank bleeding.

His father had died at the age of 35 of pneumonia, and his mother at the age of 35 of a carcinoma of the stomach. There were three sisters living and well. Two sisters died in middle life, one of carcinoma of the breast and the other of heart disease. Two brothers were living and well.

Examination revealed a well nourished, well developed, middle-aged man weighing 157 pounds. His blood pressure was 120/80, pulse 88, and respiration rate 20. His skin was markedly pale with a slight yellowish tint, but was otherwise essentially normal.

Examination of the head, neck, and chest revealed no gross abnormalities. The heart and lungs were essentially normal.

Examination of the abdomen revealed a well healed left inguinal scar at the site of hernia repair. The liver, spleen, and kidneys were not enlarged to palpation and percussion. There was a questionable mass in the right lower quadrant of the abdomen.

Rectal and sigmoidoscopic examinations were normal except for small internal hemorrhoids.

Accessory clinical findings

Results of a urinalysis were normal. Laboratory studies disclosed the following values: The hemoglobin was 6.5 gm/100 ml, the red cell count 3,900,000. The corrected sedimentation rate was 3 mm per hour, and the hematocrit reading was 30 vol.%. The mean corpuscular volume was 76, the mean corpuscular hemoglobin 22, reticulocytes 3%, platelets adequate, and white blood cell count 7,200. There were 84% segmented neutrophils, 1% nonsegmented neutrophils, 2 eosinophils, no basophils, 9 lymphocytes, and 4 monocytes. There was some anisocytosis. Blood chemistry studies revealed a nonprotein nitrogen level of 28 mg/100 ml. and a blood sugar content of 115 mg./100 ml. The van den Bergh test was reported as 0.1 mg./100 ml.

Wasserman and Kahn reactions were negative. The stool was described as greenish-black and as containing blood. Serial examinations of the stool were reported as showing *Endomoeba histolytica.* A gastric analysis revealed 12 clinical units of free acid, 18 of combined acid, and a total of 30 clinical units.

X-ray examination of the colon following barium enema showed failure of the cecum


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$200.00	Up to $40,000.00	$5,000.00	$196.50	$147.50
$150.00	Up to $30,000.00	$5,000.00	$148.50	$111.50
$100.00	Up to $20,000.00	$5,000.00	$100.50	$ 75.50

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$250.00	Up to $50,000.00	$5,000.00	$292.00	$219.25
$200.00	Up to $40,000.00	$5,000.00	$234.50	$176.00
$150.00	Up to $30,000.00	$5,000.00	$177.00	$133.00
$100.00	Up to $20,000.00	$5,000.00	$119.50	$ 89.75
The premiums for Plan L-65 will be reduced to the same premium as for Plan L-7 at age 58.				

Note: The above rates **do not** increase at age 50, or even at age 60!

†On attaining age 40, age 40 rates apply on renewal.

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to fill despite the fact that the colon was considerably distended and the obstructed edge of the opaque column of barium was irregular, the findings suggesting, of course, the possibility of carcinoma of the cecum. A repeat barium enema examination of the colon revealed "carcinoma of the ascending colon just distal to the cecum."

Operation and follow-up

The patient was prepared for operation by repeated blood transfusions, oral administration of saline purgatives, and the use of sulfasuxidene and streptomycin for 48 hours.

Exploration of the abdomen revealed a hard, irregular mass at the junction of the cecum with the ascending colon. A Meckel's diverticulum was found approximatedly 20 cm proximal to the ileocecal valve. The terminal 25 cm of the ileum and the entire right part of the colon were removed up to the left transverse colon. An end-to-end anastamosis of the terminal ileum to the left transverse colon was carried out.

Postoperatively the patient did well and made an uneventful recovery.

The pathologist reported, ". . . adenocarcinoma of the ascending colon with extension through the wall into the surrounding mesentery. Portion of ileum with Meckel's diverticulum. Fibrofatty obliteration of the lumen of the appendix. Chronic lymphadenitis of the regional lymph nodes. The grade of malignancy is two (II). Comment: Both surgical ends of the specimen are free of tumor."

The patient has been followed for 12 years, and has shown no evidence of recurrence of the carcinoma.

Comment

On close questioning this patient admitted he had noted weakness for two or three years, becoming rather severe the last three or four weeks prior to admission. It would be well to point out here that any patient—certainly one past 40 years old—who has hypochromic microcytic anemia and its attendant symptoms should be suspected of having carcinoma of the cecum, right colon, or stomach. Tumors in these viscera should certainly be ruled out before prolonged therapy for anemia is instituted.

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APRIL, 1965

THE ANNUAL OFFICERS CONFERENCE

The theme of the annual conference for county society officers at Pinehurst in February was "Freedom of Medicine." Registration included representatives of 45 of the 78 county societies, members of the Auxiliary, and leaders in business and professional life. The primary object of this conference, staged by the Committee on Public Relations, is the briefing of newly elected county society officers on the *modus operandi* of medical organization, with "job analysis" and suggestions for the conduct of county society affairs.

In addition to an outline of national and state legislative issues, panel discussions, both practical and philosophical, under the titles, "The Hospital and You" and "Interprofessional and Business Relationships," provided a stimulating and informative program. Panelists representing hospitals, health insurance, public utilities, banking, law, and medicine considered many facets of the free enterprise system, concluding that, in the cause of freedom, medicine cannot and does not stand alone.

J. S. R.

* * *

CANCER OF THE LARGE INTESTINE

The subject of this month's Cancer Committee report is the most common malignant visceral tumor in the files of the pathology department of the Bowman Gray School of Medicine. Since those files contain material from many sources, not just those of its teaching hospital, they probably represent the situation as it exists in this state at the present time. Despite this situation, one hears much more about cancer of the lung, breast, and stomach than about cancer of the large intestine. Is this because the large intestine is not so carefully concealed as the stomach or is less interesting than the breast to our mammophilic society? A person who coughs up blood is more likely to consult a doctor than is one who passes blood in the stool. He will have heard a lot more about tuberculosis and lung cancer than he has about cancer of the bowel. There is little doubt that our cultural background influences the value we attach to symptoms and signs.

Since the diagnosis of intestinal cancer is a victim of discrimination, it behooves the profession to pay more attenton to it. All too often people are treated for iron-deficiency anemia, with little or no attempt being made to find out why they have it. The patient in this month's report did not even have a rectal examination before he was treated for "anemia," a sign of disease rather than a disease itself. Not that we anticipate a film on self-examination of the colon or a campaign against eating as being carcinogenic, but we can expect the public and the profession to pay more attention to blood loss from the bowel and its results and causes.

TUBERCULOSIS, NEW AND OLD

Two papers in this issue present current problems in the continuing fight against tuberculosis in this state. Dr. Annie Scott's paper emphasizes that North Carolina school children still get tuberculosis, and the finding of cases and eradication of sources is a responsibility we have not yet discharged. Dr. McCool's paper deals with infections by anonymous mycobacteria, a subject of growing interest and concern all over the country.

One place where the subjects of the two papers overlap is the matter of tuberculin testing. In view of the significant number of infections produced by the anonymous mycobacteria, can a tuberculin reaction consisting of 5 mm of induration be considered "positive," which is to say indicative of current or past infection by *Mycobacterium tuberculosis?* What is the relation between such a reaction with standard antigens and the reaction produced by test material used for the different groups of anonymous mycobacteria? No definite answer to these questions is yet available, although work is under way in several places here in North Carolina which should eventually offer guidance.

Questions about tuberculin testing aside, mycobacterial infections are likely to remain important during the lifetime of all present members of the profession. We hope to do our part in keeping you informed about the North Carolina developments.

* * *

FOUR DECADES LATER

On the day of the Carolina-Trinity football game in the fall of 1924 change of the name of Trinity College to Duke University was announced and the Duke Endowment created benefactions of the late James B. Duke. Few in that day could have envisioned the portent of that announcement—nor do the statistics of the past 40 years of the Duke Endowment adequately portray its impact, impressive as they are: $125 million to Duke University, Furman University, Davidson College and Johnson C. Smith University; $59 million to churches, hospitals and child-care institutions in the two Carolinas; $1½ million to retired clergy and their families.

Thousands of persons have been touched —minds enriched, pain eased, and lives saved.

The recent celebration of the 40th anniversary of this great private philanthropy should remind the health professions of the Duke Endowment's contributions to human needs. The current decline of private philanthropy as compared to the rising role of the cold hand of government in education, research, and medical care should be a matter of concern for all of us. There are powerful forces at work, especially in Washington, to impose further restrictive legislation on the sources of private monies to meet human needs. Medicine can ill afford a government monopoly in the realm of human welfare.

J. S. R.

* * *

GIVE US YOUR ZIP CODE

The Society asks many things of its members, and now must ask for your zip code, to be written in on the annual roster information postcard which you will soon get. We ask this of you at the behest of the Post Office, which will soon not let us mail the JOURNAL unless this information appears on the address. From their latest communication they sound serious; hence we are seriously asking this information of you.

This editorial is written because we know that many of you are as sad as we are to see the world grow so big that numbers are needed to keep track of things. In very recent times we have seen the onrush of all-number dialing, tax account numbers, social security numbers, and now zip codes. But don't take it out on us; we're plagued too; give us your zip code and we'll share your misery.

President's Page

The Cost of Medical Practice

Whenever the dues of a Medical Society are raised there is an inevitable discontent among some of its members, and this year has been no exception in the Medical Society of the State of North Carolina. The $10.00 raise this year as approved by the Executive Council and House of Delegates, and a similar raise last year, brings the total State Society annual dues to $70.00. When one adds this to the $45 required annually by the American Medical Association and those of the individual county society, then hears of a proposed raise in AMA dues, solicitation for other organizations such as AmPac, the Association of Professions, local society projects, and many other demands for contributions, he asks, and justifiably, "Is this trip necessary?" While it is difficult to explain this to everyone's satisfaction I will attempt to show the reasoning of the Officers and Council in taking this action.

In any business—and medical practice *is* a business—a reasonable margin of income over expense is necessary for economic security. When expense equals or exceeds income, the business is headed for economic disaster. The Medical Society budget for the coming fiscal year is only $600 less than its anticipated income. In a $250,000 annual operation this is an uncomfortably narrow margin. The dues increase has therefore been engendered by the potential economic instability of this margin. One may logically inquire the source of this income, and more pertinently, where it goes. The answer to these questions may be found in the annual treasurer's report published in the Transactions and in the Journal. Lest this be too complex and confusing, however, I will try to analyze briefly.

INCOME: Membership dues constitute the major source of income; hence it follows that any substantial raise in income *must* come from the membership in the form of increased dues, increased membership, or both. While the latter has each year provided some increase, this has been largely offset by the loss in advertising revenue in the Journal during recent years. Although this is beginning to show an upward trend, the Journal at present remains a financial liability rather than an asset. Interest on reserves and investment dividends account for a small but steady source of revenue, but not enough to offset rising costs.

EXPENSES: As in any other field of endeavor, expenses increase during periods of accelerated organizational activity, and this has been especially true in the case of the Medical Society during the past few years. Headquarters Office expense rises as the larger work load demands more experienced personnel, equipment, and facilities. Expansion of activities involving the medical profession demands more representation and participation in national meetings by officers and staff. Broader committee activities require larger budgets. Political support and participation, distasteful as it may be to some, are of increasing importance if we are to safeguard our medical heritage. Many other factors might be enumerated but all point to a simple but definite conclusion: to maintain its rightful place among the higher professions, organized medicine requires financial support. It is not enough to devote our energies and skills to treatment of the ill—our *right* to do so must be protected.

The Officers and Executive Council of your Society have long been concerned with the rising costs, and any increase in dues has been recommended only after serious and conscientious consideration. Many alternatives have been considered by which expenses might be reduced: curtailment of activities, reduction of office personnel and expense, fewer communications and publications, less committee activity, shorter annual meetings, even discontinuation of the Journal. Many are possible; a few feasible. To do so, however, would decrease the stature and effectiveness of this state's organization and diminish the enviable position it now holds in the national organization.

True, maintenance of our present activities and operations entails a large financial responsibility, and in some instances, a hardship. The fact remains however, that it is a *voluntary* rather than a *mandatory* responsibility upon which our professional rights and future hinge.

T. S. Raiford, M.D.

Committees & Organizations

Committee on Nursing and Patient Care

The major health disciplines in North Carolina have approved a joint statement of purpose which recognizes improved patient care as their primary mutual objective.

The joint statement was signed by Marion J. Foster, executive secretary of the North Carolina Hospital Association; James E. Barnes, executive director, the Medical Socety of the State of North Carolina; Marie B. Noel, executive secretary, the North Carolina State Nurses Association; and Janet Campbell, president of the North Carolina League for Nursing.

H. C. Cranford, Jr., of Durham, chairman of the North Carolina Committee on Nursing and Patient Care, which sponsored the joint statement, said his committee will use the document "as a basis for developing a continuing program to improve communications between the disciplines in the interest of our common goal of better patient care for the people of North Carolina."

As a first step in this program, Cranford said, the major disciplines will be asked to publish the statement in its entirety in their respective membership newsletters and to urge full cooperation of their members in carrying out its recommendations and objectives.

The joint statement lists these specific objectives:

—To encourage and cooperate in the contining improvement of patient care through the establishment and operation of a Patient Care Committee in every hospital.

—To encourage the invitation of nursing supervisors to attend clinical staff conferences.

—To encourage supervisors of other allied departments to attend scientific meetings.

—To encourage full interchange of representatives of the major disciplines at regional, state, and national hospital and medical conferences.

—To encourage the exchange of views on matters of mutual concern through publications of the interested groups.

—To endeavor to bring about a united presentation to the public of mutual health problems.

"In these and other ways," the statement concludes, "we will strive to promote a more harmonious intramural relationship with other professional and technical organizations in the health field to the end that better patient care will be provided for the people of North Carolina."

Cranford said the joint statement of the intent and desire of the major health disciplines to work together to improve patient care in a state is, so far as the North Carolina Committee on Nursing and Patient Care knows, the first of its kind in the nation.

Organized in 1950, the North Carolina Committee on Nursing and Patient Care is a quasi-official coordinating agency for major health groups in the state, both governmental and voluntary. It meets quarterly. The Committee is composed of 10 representatives of statewide health organizations and 11 public members.

Hospitals Get 28 Cents of Health Dollar

Hospitals received the largest share of every health dollar spent by Americans in 1963, according to Department of Commerce figures on personal expenditures.

Twenty-eight cents of every health dollar went to hospitals, 25 cents went to doctors, 18 cents was spent on drugs, 10 cents was paid to dentists, 8 cents went for health care, 6 cents went for the purchase of appliances, and 5 cents was spent on all other services.

The doctors' share of payments for health care was up one per cent from 1962, but was down one per cent from the share received 10 years earlier.

An analysis of the 1963 statistics by the American Medical Association's Department of Medical Economics shows the nation's consumers spent $23.6 billion for health care in 1963, including $6.6 billion for hospital charges, $4.3 billion for drugs, and $5.9 billion for physicians' services.

Bulletin Board

COMING MEETINGS

Medical Society of the State of North Carolina, 111th Annual Session—Queen Charlotte Hotel, Charlotte, May 1-5, 1965.

North Carolina Heart Association, 16th Annual Meeting and Scientific Sessions—Jack Tar Hotel, May 20-21.

Tri-State Medical Association Meeting—The Carolinian, Nags Head, June 7-9.

Mountain Top Medical Assembly—Waynesville, June 17-19.

Duke Postgraduate Course—Morehead City, July 12-17.

Charlotte Postgraduate Seminar—Presbyterian Hospital, Charlotte, September 29-30.

Fifth District Medical Society—Mid Pines Club, Southern Pines, October 6.

American Medical Association, 114th Annual Convention—New York City, June 20-24.

AMA-ASHA Seventh Annual Preconvention Session on School Health—New York City, June 20. (For information write Department of Community Health and Health Education, American Medical Association, 535 North Dearborn Street, Chicago, Illinois 60610.)

New Members of the Society

Drs. Robert Leo Stuber, Path, 475 Indiana Avenue, Southern Pines; Ted F. Burton, ObG, 323 Fleet St., New Bern; Clinton Kesler Atkinson, 516 W. 4th St., Siler City; Hugh M. Shingleton, ObG, N. C. Memorial Hospital, Chapel Hill; John Snow Glover, ObG, 1850 E 3rd St., Charlotte; Horace Truman Ray, Jr., 101 E Plank St., Warsaw; Albert R. Hartness, GP, Mocksville;

Also, Drs. Pedro Carreras, P, Caswell Center, Kinston; Ernest Benjamin Hodge, Anes, Kate B. Reynolds Hospital, Winston-Salem; Robert Worth Steagall, Jr., D, 1850 E 3rd St., Charlotte; John Butler Schug, ObG, 1012 Kings Dr., Charlotte; Thomas Hugh White, ObG, 1850 E 3rd St., Charlotte; Fred Huntley Allen, Jr., N, 1012 Kings Dr., Charlotte; James Pressly Hamilton, S, 1012 Kings Dr., Charlotte, Alvin Dean Couch, U, 1850 E 3rd St., Charlotte.

News Notes from the Bowman Gray School of Medicine of Wake Forest College

Plans for the establishment of a central school for the training of paramedical personnel have been announced by the Bowman Gray School of Medicine and North Carolina Baptist Hospital.

An $18,000 grant was recently awarded to the trustees of Wake Forest College by Educational Facilities Laboratories, Inc., New York City, to support study and planning necessary to the development of the new school at the medical center.

The school, which represents a new concept in paramedical education, will be included in the medical center's $16,250,000 expansion and redevelopment project, now in the planning stages.

Educational opportunities for paramedical students traditionally are offered in separate training programs. There are 10 paramedical schools currently in operation at the medical center.

The central school plan is designed to combine all of these training programs into one school and to expand the program to offer training in additional paramedical specialities.

Educational Facilities Laboratories, Inc., established by the Ford Foundation, is particularly interested in the project because the school, as a prototype, could become a model for the planning of paramedical schools at other medical centers over the country.

* * *

Eight North Carolina college students have been awarded Reynolds Scholarships for study at the Bowman Gray School of Medicine.

The scholarship program, sponsored by the Z. Smith Reynolds Foundation, will provide each recipient $14,000 during his four years in medical school. In addition, the foundation will supplement each scholar's internship salary, during his fifth year of medical education, guaranteeing him an income of $5,000 for that year.

Selection of the scholars was made by the medical school's committee on admissions on the basis of character, scholarship, potential as a physician, and financial need.

The recipients, who will enter the Bowman Gray School of Medicine in September, are Robert A. Buchanan Jr. of Greensboro and the University of North Carolina; L. Thompson Heffner, Jr., of Newton and Davidson College; R. McPhail Herring Jr., of Clinton and the University of North Carolina; L. Donald Johnson of Burlington and Elon College; John S. Kitchin of Wake Forest and Duke University; John McL. Nordan of Concord and N. C. State; John A. Phillips of Cameron and the University of North Carolina; and Julian R. Taylor of Raleigh and N. C. State.

* * *

Dr. Hugh B. Lofland Jr., associate professor of biochemistry, has been awarded a $58,000 grant by the National Institutes of Health to support studies aimed at determining what effects age and cholesterol intake have on the occurence of atherosclerosis.

His project, which involves research on cebus monkeys, is an outgrowth of a pilot study conducted in 1963. The previous work not only indicated that monkeys will develop atherosclerosis when kept on a high-cholesterol diet but also that age may be a factor in the development of the disease.

Dr. Ralph C. Gordon, an intern at North Carolina Baptist Hospital, has been awarded a $4,800 Wyeth fellowship in pediatrics. He will begin his residency July 1 at Baptist Hospital and the Bowman Gray School of Medicine.

Gordon, a native of Lexington, Ky., is one of 15 interns over the United States who received Wyeth fellowships in pediatrics this year.

* * *

A three-day postgraduate course in obstetrics and pediatrics was held at the Bowman Gray School of Medicine March 9-11. Designed primarily for general practitioners, the course was sponsored jointly by the medical school and the Maternal and Child Health Section of the North Carolina State Board of Health.

* * *

Dr. William H. Boyce, professor of urology, presented a paper on "Factors Influencing the Lability of Human Renal Blood Flow" at a meeting of the Society of University Surgeons in Philadelphia. He also presented an exhibit on "Human Renal Arterial Blood Flow."

* * *

Dr. Frank C. Greiss Jr., assistant professor of obstetrics and gynecology, was recently elected to membership in the Southern Gynecological and Obstetrical Society.

News Notes from the Duke University Medical Center

Dr. Eugene D. Day, associate professor of immunology, Duke Medical Center, is the author of a new book just off the press.

Entitled "The Immunochemistry of Cancer," the book attempts to answer the question, "Are there such things as real cancer antigens?"

The 170-page book, published by Charles C. Thomas, is a monograph in the Bannerstone Division of the American Lectures in Living Chemistry series. It is edited by I. Newton Kugelmass, consultant of the Departments of Health and Hospitals, New York, N. Y.

* * *

Dr. Thomas D. Kinney, chairman of the department of pathology at Duke University Medical Center, has been elected president of the American Association of Pathologists and Bacteriologists.

Dr. Kinney was elected at the organization's annual meeting in Philadelphia.

Dr. Kinney has taught at Yale University, Boston University, Tufts College Medical School, Harvard Medical School, Western Reserve University School of Medicine, and Duke, where he is a professor in pathology, as well as head of the department.

* * *

Organ transplantation is still not practical in treating urinary diseases, a Duke Medical Center professor told Australian urologists meeting in Melbourne recently.

Dr. Saul Boyarsky, director of urologic research at Duke, said more research and a better understanding is needed before successful transplantation surgery can be performed in this area. But interest in transplantation is growing rapidly among urologists, he noted.

* * *

Herbert J. Hart, president of the American Orthotics and Prosthetics Association, was banquet speaker at the group's regional meeting in Durham March 4-6.

A scientific paper by two Duke Medical Center orthopaedic surgeons was one of the program's high lights. Dr. J. Leonard Goldner, professor of orthopaedic surgery, and Dr. Frank W. Clippinger, associate professor of orthopaedic surgery, discussed a new Prosthetic Pylon Study, one of two such research projects now under way in the United States.

* * *

Twelve prosthetics experts met at Duke Medical Center in March 4 to compare research findings made during the past year.

The group was headed by Bert Titus, chairman of the ad hoc committee on lower extremity fitting of prosthesis. Titus is chairman and assistant professor of orthosis and prosthesis at Duke.

Research in this area is conducted under supervision of the National Research Council.

News Notes from the University of North Carolina School of Medicine

Plans for a child development and mental retardation center at the University of North Carolina picked up momentum recently with a joint announcement that a foundation has provided planning funds and the University has appointed a full-time coordinator.

The Joseph P. Kennedy Jr. Foundation has announced that it has pledged $20,000 to underwrite up to one year the costs of planning and developing the center. Half of the pledge is to be made available immediately.

Dr. George R. Holcomb, associate dean of the UNC Graduate School for Research Administration and assistant professor of anatomy at the UNC School of Medicine, has been appointed full-time coordinator.

Already available to help finance construction of the center is $390,000 appropriated by the 1963 General Assembly. The funds were earmarked for a child development center which would include beds for the treatment of emotionally disturbed children.

* * *

A two-day course on "Modern Concepts of Pediatric Cardiology" was sponsored on March 12-13 by the North Carolina State Board of Health and the American College of Cardiology in cooperation with the University of North Carolina School of Medicine.

The program has been designed primarily for

pediatricians, internists, family physicians and other practicing physicians with special interests in children's diseases.

Other participants will be drawn from the UNC medical faculty.

* * *

Dr. Isaac M. Taylor, dean of the UNC School of Medicine, was the dinner speaker in Jacksonville on March 10 at a meeting of the Coastal Plain Chapter of the North Carolina Academy of General Practice.

His subject was "Education for Medical Practice."

Dr. John T. Sessions, Jr., chief of the UNC Division of Gastroenterology, was one of four speakers for an afternoon program. He explained the usefulness and practicality of the sigmoidoscope in examining the large bowel.

* * *

The 61st annual Congress on Medical Education heard a University of North Carolina surgeon review the evolution of the National Board of Medical Examiners in Chicago recently.

Dr. Nathan A. Womack, chairman of the Department of Surgery at UNC and past president of the National Board of Medical Examiners, addressed a morning session at which the NBME's 50th anniversary was recognized.

A UNC dermatologist reported recently to North Carolina and Virginia pharmacists at a Drug Symposium in Chapel Hill on common skin infections and acne.

Dr. Joseph M. Hitch, Clinical Professor of Medicine, was the second speaker for a five-week series of meetings being devoted to a better understanding of drugs and preparations which affect the skin.

* * *

The use of toads to help understand potassium depletion in human kidneys was described by a third-year medical student at the UNC School of Medicine during the annual meeting in New Orleans of the Southern Society for Clinical Investigation.

James A. Yount, a native of Claremont, presented a scientific paper entitled "The Effects of Potassium Depletion on Net Water Transport Induced by Vasopressin Across the Isolated Toad Bladder."

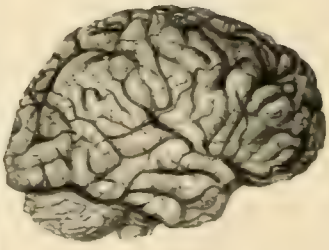
Yount's work at the University of North Carolina School of Medicine was conducted under the supervision of Dr. Walter Hollander, Jr., associate professor of medicine and director of the Clinical Research Unit at N. C. Memorical Hospital.

* * *

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leading to such symptoms as mental confusion, diplopia, vertigo and lightheadedness.



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where ischemia causes pain, spasm, ache, intermittent claudication; coldness, numbness or ul of extremities.

job training program for operating room technicians were awarded certificates during special ceremonies at N. C. Memorial Hospital on February 16.

Ceremonies marked the end of a 16-week training program for five pioneering students. N. C. Memorial Hospital became the first hospital in the state last June to sign a contract for the program under the national Manpower Development and Training Act.

* * *

The National Cancer Institute has renewed a research grant under which a medical-pharmacy team at the University of North Carolina is studying potential anticancer agents.

A three-year, $63,000 grant has been made to Dr. Claude Piantadosi, professor of pharmaceutical chemistry at the UNC School of Pharmacy. The co-investigators are Dr. J. Logan Irvin, head of the Department of Biochemistry at the UNC School of Medicine, and Dr. Shu-Sing Cheng, UNC instructor in biochemistry.

* * *

The impact of medical care on the survival of people in a community fallout shelter system was described by a University of North Carolina surgeon in New Orleans recently.

Dr. Warner L. Wells, associate professor of surgery at the U.N.C. School of Medicine, addressed a meeting of the American Medical Association's Council on National Security.

Dr. Wells participated in a federally financed study of fallout shelters completed in late 1963. The study was based on information from Durham and Orange counties and its purpose was to estimate survival in a fallout shelter system during a two-week emergency.

* * *

What effects do visitors have on the health of patients and on the operations of hospitals in North Carolina

Do visitors spread infections, get in the way of nurses, cause patient fatigue and generally hinder hospital routines?

A novel study of the controversial visitor situation in the state's hospitals may suggest some answers.

The final report on a six-month hospital visitation survey is scheduled for public release around June 1. The survey is being conducted at the request of the N. C. Committee on Nursing and Patient Care and under the joint sponsorship of the U.N.C. Department of Hospital Administration here and the Duke Endowment of Charlotte.



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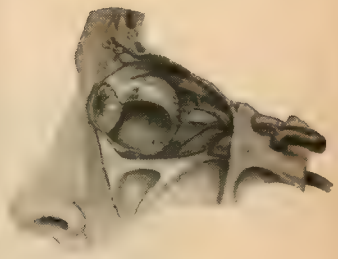
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University of North Carolina School of Public Health

Educational opportunities at both the graduate and continued education level in the field of community safety have been announced by the Department of Public Health Administration, School of Public Health, University of North Carolina at Chapel Hill.

Expanding a program initiated three years ago, the department will enroll six graduate students in the curriculum leading to a Master of Public Health degree for the academic year beginning September 1965. Up to 30 students will be accepted for the short course dealing with program development techniques in accident control, which will be held May 31-June 4, 1965.

"The graduate program is open to persons from the fields of education, nursing, engineering, social science, medicine, and allied fields of interest who are seeking careers as accident control specialists in a local, state, or national health agency or in a private organization," Dr. Charles Cameron, professor and program director, said.

"Through a special grant from the U. S. Public Health Service, financial support is available for qualified students who are accepted in the master's program," stated Dr. Cameron. "Interested persons are urged to contact the department without delay."

Applications are now being accepted for the 1965 short course, according to Miss Janice Westaby, assistant professor and co-director of the program. Information can be obtained by writing to the Accident Control Program, Department of Public Health Administration, UNC School of Public Health, Drawer 229, Chapel Hill, North Carolina.

North Carolina Pediatric Society

The North Carolina Pediatric Society has established a loan fund for pediatric residents in the State of North Carolina.

For the time being, loans will be limited to a maximum of $1,000 per year for each resident. There will be no interest on the loan until one year after the completion of pediatric residency training or five years after graduation from medical school (whichever is sooner). Thereafter, the unpaid balance will be subject to interest of 6% per annum. Principal payments likewise will begin one year after completion of pediatric residency training or five years after graduation from medical school.

Application forms may be obtained from Dr. Jerome S. Harris, Chairman North Carolina Pediatric Society Committee on Resident Loans, Box 2925, Duke Hospital, Durham, North Carolina 27706.

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American Medical Association

Department of Nursing

Copies of the Proceedings for the First National Conference of Professional Nurses and Physicians entitled "Medical and Nursing Practice in a Changing World" have recently been published and are available for $1.50 each.

Nurses may purchase copies from the American Nurses' Association, 10 Columbus Circle, New York 19, New York. Physicians are requested to forward their orders to the Department of Nursing, American Medical Association, 535 North Dearborn Street, Chicago 10, Illinois. Any others who are interested, may purchase a copy from either organization.

Association of American Medical Colleges

Twenty-eight junior and senior U. S. medical students have been awarded foreign fellowships which will enable them to obtain supervised medical experience in relatively underdeveloped areas of the world, the Association of American Medical Colleges has announced.

The fellowships are made possible by a grant from Smith Kline & French Laboratories, Philadelphia pharmaceutical firm. With the current selection, the Association, during six years, has awarded a total of 180 fellowships for work and study in 42 countries of Africa, Asia, and Latin America.

Among the 1965 fellows is Howard Thomas, Hinshaw, Greensboro, of the University of North Carolina, who will work in Friends Hospital, Tiriki, Kenya.

News Notes from the North Carolina Heart Association

Current Heart Fund-supported heart research grants and fellowships to 15 scientists at four North Carolina institutions total $213,025 with an additional tentative commitment of $199,365 for 1965-66, the North Carolina Heart Association announces.

Current awards bring total allocations of Heart Fund dollars for cardiovascular research in the state to $2,227,412 since 1949.

Dr. Robert Cordell, of Bowman Gray School of Medicine, chairman of the state heart group's research committee, stated that applications for grants have just been received from 47 North Carolina heart researchers and these applications will be reviewed by Dr. Cordell's committee during the next few weeks.

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North Carolina Heart Association volunteers are hoping for a record-breaking Heart Fund campaign tally for the 16th consecutive year. Reports are still incomplete, but reported campaign receipts to date total $472,000, according to Mrs. J. Spencer Love, state Heart Fund chairman.

Last year, the North Carolina Heart Association was the leading voluntary health agency in the state in terms of financial support. The state heart group, an affiliate of the American Heart Association, raised less than $200,000 in 1955 but has tripled its annual income from public contributions in the meantime. Its first campaign was conducted in 1950.

More than 92,000 Tar Heels participated in the 1965 "Hope For Hearts" crusade, held throughout the state during February. Only three-fourths of the final drive reports have been received so far, but reports from most counties indicate substantial gains, according to Mrs. Love.

The John and Mary R. Markle Foundation

Twenty-five young medical scientists, all faculty members of medical schools in the United States and Canada, have been appointed Markle Scholars in Academic Medicine by the John and Mary R. Markle Foundation of New York.

The grants were first made in 1948 "to relieve the faculty shortage in medical schools by giving support to young teachers and investigators early in their careers," according to John M. Russell, president of the fund.

Medical schools nominated 74 candidates for the grants this year. Six committees of educators and other professional men helped to select the 25 Scholars, whose appointments will begin July 1, 1965.

Two of new appointees are from North Carolina. They are Andrew Grover Wallace, M.D., Duke University School of Medicine; and Reginald G. Mason, M.D., Ph.D., University of North Carolina School of Medicine.

University of Virginia School of Medicine

The Department of Neurology and Psychiatry of the University of Virginia School of Medicine announces a new program for training in psychiatry. The purpose of this program is to foster the development of psychiatric training for non-psychiatric residents and to extend support to practicing physicians who want intensive psychiatric training but who do not intend to become psychiatrists.

This new program is made possible through a new grant-in-aid from the National Institute of Mental Health. Part of the time will be spent on the Psychosomatic Consultation Service and part in General Psychiatry.

Trainees will fall into one of the following two

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categories:

1. Intensive Psychiatric Training for Non-Psychiatric Residents.

2. Psychiatric Training for the Non-Psychiatric Practitioner (who does not intend to practice psychiatry)

Interested physicians should contact Dr. Richard W. Garnett, Jr., Department of Psychiatry, University of Virginia School of Medicine, Charlottesville, Virginia.

American Board of Obstetrics and Gynecology

The next scheduled Part I (written) examination of this Board will be held at various examining centers in the United States, Canada, and military bases outside of the continental United States on Friday, July 2, 1965, at 2:00 P.M.

New and reopened applications and requests for re-examination in the Part II examination for 1966 will be accepted in the office of the Secretary during April and May, 1965. CANDIDATES ARE REMINDED THAT DUPLICATE LISTS OF PATIENTS DISMISSED FROM THEIR SERVICE DURING THE TWELVE MONTHS IMMEDIATELY PRECEDING APRIL 1, 1965 MUST ACCOMPANY APPLICATION OR REQUEST TO TAKE THE PART II EXAMINATION.

Current Bulletins outlining present requirements and application forms may be obtained by writing to the Office of the Secretary. Applicants are urged to familiarize themselves with the current rules and regulations, particularly in view of the many changes in application and examination schedules effective beginning this year.

Diplomates of this Board are requested to keep the office of the Secretary informed of their current address.

U. S. Department of Health, Education, and Welfare

The cooperation of physicians is requested in continuing studies of the following conditions:

Histologically proven cases of **Hodgkin's disease**—in particular, patients with disease clinically limited to areas either above or below the diaphragm.

Ewing's sarcoma: patients with a presumptive radiographic diagnosis of a malignant bone tumor, prior to establishment of the diagnosis by biopsy.

Metastic lung tumor: patients with well defined, measurable, bilateral lung metastases (from any primary site).

Physicians interested in having their patients considered for admission and treatment may write Ralph E. Johnson, M.D., Clinical Center,

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* * *

U. S. Hope to Visit Nicaragua

The next port of call for the hospital ship S. S. HOPE will be Corinto, Nicaragua, according to a joint announcement recently by Nicaraguan Ambassador Dr. Guillermo Sevilla-Sacasa and Dr. William B. Walsh, president of Project HOPE.

The floating medical center currently is in Conakry, Guinea, on the west coast of Africa. The ship is scheduled to weigh anchor in Conakry in mid-August and return to the United States for overhauling in early September.

The HOPE, the world's first peacetime hospital ship, is scheduled to leave the United States in early January of 1966 and arrive in Corinto the same month. The 10-to-11-month mission will mark the vessel's first voyage to Central America.

Although the ship will remain moored in Corinto's port, Project HOPE will conduct three other programs simultaneously throughout the country. Teams will spread out to Managua, the nation's capital, as well as to Leon and remote areas in the north.

The HOPE team in Leon will conduct its teaching-training program at the National University of Nicaragua and at the University's 186-bed hospital. In Managua, the HOPE doctors and nurses will be based in a new 750-bed hospital.

HOPE was requested to come into the country by the Nicaraguan Government. Nicaraguan President Dr. Rene Schick Gutierrez officially requested Dr. Walsh to bring the white hospital ship to Nicaragua during the HOPE President's recent trip to the country.

"We look forward with the utmost enthusiasm to this new opportunity to bring HOPE to Nicaragua, the heart of Central America," Dr. Walsh told the Nicaraguan President.

Dr. Shick, in formally inviting Dr. Walsh and the S. S. HOPE, said that the services and facilities of the ship "would be of incalculable benefit for the country of Nicaragua."

The trip to Nicaragua, largest of the Central American republics, marks the fifth voyage of the S. S. HOPE. The ship's maiden voyage in 1960 was to Indonesia and South Viet-Nam. Then came separate trips to Peru and Ecuador in South America and the current journey to Guinea, in Africa.

The S. S. HOPE's voyages are sponsored by Project HOPE, which is the principal activity of The People-to-People Health Foundation, Inc., of Washington, D. C. The Foundation was founded in 1958 by Dr. Walsh.

* * *

Booklet on Feminine Hygiene for Retarded Girls

The mentally retarded girl, too, becomes a woman. At the first signs of adolescence, despite her mental age of perhaps four to eight years, she feels the same confusion, anguish and panic experienced by all girls.

Until now teachers and mothers of retarded girls have had no helpful aids to explain the changes occurring to these often confused, sometimes frightened youngsters.

A booklet just published by Kimberly-Clark Corporation fills the need for sensitive and sensible information on feminine hygiene for retarded girls. "How to tell the retarded girls about menstruation" is a simple explanation of the body changes that takes place at adolescence and of the cleanliness that should be taught to every girl.

The booklet was prepared by Marion Jones, R. N., director of Kimberly-Clark's extensive public service program of providing information on health and feminine hygiene to millions of girls and women throughout the world. Its explanation can be adapted to the requirements and intellectual grasp of each mentally retarded girl, whether educable or trainable.

Copies of the free booklet are available from the Educational Department, Kimberly-Clark Corporation, Box 551-MRB, Neenah, Wisconsin.

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For Sale: Fischer 75 MA X-ray-Fluoroscopy Unit and all accessories. Fischer Diathermy Burdick EK2 Electrocardiograph. C. T. Harris, Jr., M.D., 425 Roberts Street, Salisbury, N. C.

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SPACE AVAILABLE, Medical Arts Center, Fayetteville, N. C. Suitable for General Practice or specialty. Modern building,in established medical center. Physicians in private practice in area. For information, write Box 3514, Fayetteville, North Carolina.

The Month in Washington

The American Medical Association supports a five-year extension of the Vaccination Assistance Act.

Dr. James Z. Appel, Lancaster, Pa., president-elect of the AMA, and Dr. Robert C. Long, Louisville, Ky., a member of the AMA board of trustees, presented the AMA's position on the vaccination program and three other health care bills at a hearing of the house commerce committee.

"Medicine, on the national, state, county, and community levels, has consistently worked to bring to its patients the benefit of advance in medical research and development," Dr. Appel said. The physicians of America and the Public Health Service have long been partners in the fight against disease and in the campaign to eradicate contagious disease wherever it is found.

"The Vaccination Assistance Act of 1962 was enacted (with AMA support) in recognition of the fact that there existed all over the country pockets of people, particularly children, who were not utilizing, or who did not have available to them, vaccines for the prevention of poliomyelitis, diphtheria, whooping cough, and tetanus. The Act authorizes grants to the states to enable them to engage in a concentrated campaign to provide immunization to people in these pockets. We believe that substantial progress has been made, and we recommended the program's continuation . . .

"Medical research has since (1962) provided an effective vaccine against measles. An intensive vaccination program directed at preschool age children can dramatically lessen the incidence of the disease and reduce or eliminate the serious residual effects which are sometimes attendant with the disease. We therefore believe that it is most fitting that in extending the Vaccination Act, H.R. 2986 include measles in the authorized vaccination programs."

The AMA also supported a five-year extension of the federal grant program for family health services for migratory workers.

The AMA opposed legislation that would authorize the Public Health Service to construct and operate regional or national research facilities. Dr. Appel said:

"We fail to see how research can be classified as 'regional' or 'national' or 'local'. Research in cancer which may be carried on in a medical school research facility in a midwestern city is as 'national' in character as if it were carried in a city on the west coast. Research in heart disease, or in any of the many areas of interest to medical science, has no geographic bounds . . .

"We believe that the country will best be served through the utilization of the experience and knowledge of institutions which are currently engaged in medical research. Their record is a good one. We see no reason for beginning a new program which would require many months or years and large sums of money, and which would compete for scarce skilled research manpower . . .

Dr. Long outlined the AMA's opposition to use of federal matching funds for initial staffing of community health centers.

"We believe that once the center has been constructed, the community should assume the remaining responsibility," Dr. Long said.

"The providing of medical care is essentially a community affair. The federal government's participation in a matching grant program stimulates the start of the local program and helps the state or community overcome the initial heavy financial burden. Most often, the problem initially facing a community is the one-time large construction-cost expenditure. Assistance here, by way of federal matching grants, is, in our opinion, appropriate. The funds for staffing, however, should remain the sole responsibility of the local community. There does not appear to be any justification for federal participation in financing this type of expense, nor is it likely to phase out, as stated in the bill, once the federal government has assumed this responsibility. If the community cannot, or will not, support the program from its beginning years, it is not likely to do so later."

As for legislation that would authorize federal mortgage insurance and loans to help finance the cost of contructing and equipping facilities for the group practice of medicine and dentistry, the AMA said:

"We do not believe that this proposal for federal subsidy can be justified. Special preference to physicians who will be eligible for the loan or mortgage insurance under this measure can only be supported on the basis that adequate sources of financing do not exist through banks, insurance companies, and other agencies. We know of no such evidence. It has not been demonstrated that this legislation is required to expand currently available public or private funds to finance or insure the construction and equipping of medical or dental groups.

"The bill specifies that the surgeon general shall give preference to, in effect, closed panel prepaid group health plans. This priority discriminates against other physicians in private practice either as solo practitioners or in partnerships or groups."

The AMA also has emphasized to Congress that the Johnson Administration's plan for a network of regional medical complexes could have "significant impact" upon the practice of medicine in the United States.

Dr. F. J. L. Blasingame, executive vice president of the AMA, advised Senator Lister Hill (D., Ala.), chairman of the senate labor and public welfare committee, that the AMA could not testify on short notice on S. 596, the "Heart Disease, Cancer and Stroke Amendments of 1965."

Despite the far-reaching potentialities of the legislation, Hill unexpectedly called two days of hearings on short notice in February.

Blasingame said in a letter to Hill:

"We regret that we found it necessary to inform you that we could not present the Association's views at that time. Because of the short notice given of the hearings, it was not possible to accord this important legislation the proper measure of consideration which it warrants.

"We are sure that this committee must appreciate the tremendous significance of the legislation before it. The purposes of it, namely to assist in combating heart disease, cancer and stroke, and other major diseases, are most laudatory. The eradication or control of such diseases, as well as of all other medical afflictions of man, has been, and continues to be, an active concern and goal of medicine.

"We deem it imperative that S. 596 be given consideration commensurate with the significant impact which it could have upon the course of medicine and upon the health needs of our citizens.

"The Association has initiated steps within its organization to give to S. 596 a most careful analysis of its intent and the manner in which it is sought to be implemented and achieved. We cannot urge too strongly to this committee that this legislation raises considerations with far-reaching ramifications and with a potential of far-reaching effects upon the nation's health needs. The course to be charted must represent the most judicious employment of the nation's medical resources."

The bill would amend the Public Health Service Act by adding a new title which would authorize the appropriation of $50 million for fiscal 1966, and such sums as may be necessary for the next four years, to be used as grants to assist public or private nonprofit universities, medical schools, research institutions, and other public or nonprofit institutions and agencies in the planning, establishing, and operating of regional medical complexes for research and training and for demonstrations of patient care in the fields of heart disease, cancer, stroke, and other major diseases.

The Administration has refused to give Congress the total amount of planned expenditures on the program, if it is approved by Congress, over the five-year period. But Administration sources estimated $1.2 billion when the legislation was introduced.

* * *

President Johnson has named Dr. Luther L. Terry for another four-year term as surgeon general of the Public Health Service.

A 53-year-old native of Alabama, Terry has been with the PHS since 1942 when he came assistant director of the National Heart Institute. The late President Kennedy appointed him surgeon general in 1960.

Book Reviews

The Healing of Persons. By Paul Tournier. Price, $4.95. New York: Harper & Row, 1965.

Dr. Paul Tournier is a Swiss physician who has practiced medicine in Geneva since 1928. In one of his books, he describes himself as "the least specialized of all doctors." He goes on to state that he is "nothing more than an observer of man, the infinitely diverse and infinitely similar man who comes to me day after day to open his heart." His observant nature, his religious convictions, and his interest in the total person of his patients have led him to the concept of "medicine of the person."

Dr. Tournier's first and most important work on this subject, which was originally published in Switzerland in 1940 as **Medicine de la Personne,** is now available in this English translation. The release of this volume follows the publication during the last few years of English translations of nine other works, including **The Meaning of Persons** (1957) and **A Doctor's Casebook in the Light of the Bible** (1960). These volumes have had a wide and enthusiastic reception among laymen, ministers, and physicians in Europe and, more recently, throughout this country.

Someone has recently observed that the young minister is given all the answers during his training (that is, in theology), but frequently may not know how to discover the problems which concern his people, while the young physician is well trained in the skills of diagnosis, but often lacks the solutions for the problems he uncovers

The physician can appreciate the truth of the latter statement when he remembers the lack of interest and frustration that has come to most of us as medical students and young physicians after the excitement of the diagnostic search was over and we realized that we had no cure for the disease in question or the patient failed to respond to the therapy we prescribed.

As an observant and profound student of man, Dr. Tournier offers an answer to this dilemma. His approach is not a substitute for scientific medicine, but rather a synthesis of the questions and answers from both medical science and religious insight. He feels that modern man is faced with an artificial dichotomy of the material and the spiritual and is trying to live as if the spiritual world and the material world were separate and unrelated. This dichotomy originated with Descartes, who attempted to establish a scientific objective view of the world by eliminating any consideration of religion or values. Undoubtedly this approach contributed much toward freeing science from those irrational medieval restraints which hindered scientific discovery. Yet daily each observant physician must realize that science alone has neither answered the great issues of our day, such as the problem of international strife or of the use of atomic energy; nor the ethical issues of modern medicine, such as euthanasia or the problems associated with organ transplants from healthy donors; nor the day-to-day personnel problems of the physician himself, his family and his patients.

Dr. Tournier does not suggest that we reject the advances of medical science, but suggests that as physicians we should constantly strive to remember that we are treating, not diseases, but persons who have a body, mind, and soul. In another of his books he reiterates the statement that the duty of the doctor is "sometimes to heal, often to afford relief, and always to bring consolation." According to the concept of medicine of the person, the physician's mission can thus be seen to be twofold: "He must first make use of every available technical resource with a view to curing the disease, whether it be surgery or drugs, physiotherapy, advice on hygiene, or psychotherapy. But his art remains incomplete if he does not also make some effort to help the patient solve the problems of his life."

In the second function (which wise physicians have spontaneously exercised throughout history), the doctor functions not so much as a scientist but as a man. This is why "medicine of the person concerns first of all the person of the doctor himself." The science and techniques of medicine can be taught, but the art of personal medicine derives "from our own spiritual maturity, and from the experience of our own lives, from the answers we have found to our own personal problems through the grace of God." To the extent that the patient becomes a case and solely the object of scientific curiosity, medicine becomes less personal and less human. To the extent that the physician begins to bring his own frequently hectic life into balance, to solve his own personal conflicts, and to influence his patients by the example of his own life, then medicine again becomes personal. Medicine of the person, is, therefore, "a matter of a spirit which can animate any doctor, a deeper relationship which he establishes with each one of his patients, insofar as he becomes himself more fully a person, and insofar as his patients become also more fully persons through coming into contact with him."

Medicine of the person is neither a specialty nor a special technique, but is an approach to medicine which combines the best of modern scientific medicine with a very personal concern for each individual patient. This concept of medicine is equally applicable to those physicians who are in teaching, laboratory and administrative positions as it is for the clinician who is confronted daily with the problems of life which this book so wisely discusses. The former have the challenge to see that their departments and institutions (whether medical schools, research laboratories or hospitals) do not become "great impersonal machines" and that their medical and paramedical students do not become impersonal dispensers of purely technical medicine. The clinicians have the additional opportunity to guide their patients to some solution to the real problems of their lives while attempting to relieve the symptoms or cure the disease which brought the patient to the physician.

At a time when the scientific, objective viewpoint reigns almost supreme and when some would relegate religion to the position of an interesting bit of ancient history, Dr. Tournier has had the courage to speak out for a synthesis of scientific medicine with a conception of man which is in conformity with the teachings of the Bible. He challenges each physician to "come down from his scientific pedestal" and to meet his patient "as man to man, finding spiritual communion with him." The physician who is willing to accept this challenge will find that his personal and professional life is infinitely richer. The meditative study of this volume and the others by the same author offers the means for beginning such an endeavor.

More than 19,000 loans totaling more than $27,600,000 have been guaranteed under the program by the AMA's Education and Research Foundation through a cooperative program with three banks.

More than 100,000 North Carolinians have died from heart and blood vessel disease since January 1960, the North Carolina Heart Association says.

In Memoriam

Alexander Wingate Simmons, M.D.

Burlington was saddened by the death of Dr. Alexander Wingate Simmons, general practitioner, who died on January 4, 1965, at the age of fifty.

Dr. Simmons was born on December 20, 1914, near Roseboro, and attended public school in Stedman. He attended Campbell College for two years and received his B.S. degree in medicine at Wake Forest College in 1937. He then completed his medical education at Jefferson Medical School, Philadelphia, Pa., where he received his M.D. degree in 1939. After completing his internship at St. Louis Baptist Hospital, St. Louis, Mo., he located in Burlington in general practice.

Dr. Simmons was past president of the Alamance-Caswell Medical Society and a member of national and state societies. He was a member of the First Baptist Church of Burlington, and a member of the Board of Trustees of Campbell College.

In addition to his medical practice, Dr. Simmons was a flying enthusiast. He owned and operated his own plane, serving as a member of the Aeronautic and Space Medical Association.

Dr. Simmons is survived by his wife, the former Kitty Fuller, of Richmond, Va.

The death of Dr. Simmons has saddened the city of Burlington, coming only four days after the death of Dr. E. T. Kraycirik, a prominent Burlington physician. He will be missed by his patients and many friends.

Emory Thomas Kraycirik, M.D.

WHEREAS, Emory Thomas Kraycirik, M.D. was called from us by death on December 31, 1964, and

WHEREAS, Emory Thomas Kraycirik, M.D. was a loyal, faithful and actively participating member of the Alamance-Caswell Counties Medical Society from 1948 until his death, having served as a past-president as well as a delegate to the State Medical Society, and as a member of several committees of both societies, and

WHEREAS, he further demonstrated his devotion to medicine and the people he served by filling the office of Chief of Medicine at Alamance General and Alamance County Hospitals, a three year term as Chief of Staff at Alamance County Hospital, and served for many years on the part-time teaching Faculty at Duke Hospital and North Carolina Memorial Hospital, and

WHEREAS, because of his devoted and untiring service to his practice of Internal Medicine, his courteous and loving care for his patients, and his steadfast, friendly relations with his fellow physicians, his loss will be greatly felt by his colleagues. Therefore be it

Resolved, That on behalf of the entire membership of the Alamance-Caswell Counties Medical Society, these resolutions in tribute to the memory of our late fellow member be adopted; and be it further

Resolved, that a copy of these resolutions be spread upon the minutes of the Alamance-Caswell Counties Medical Society, and that a copy be sent to the breaved family.

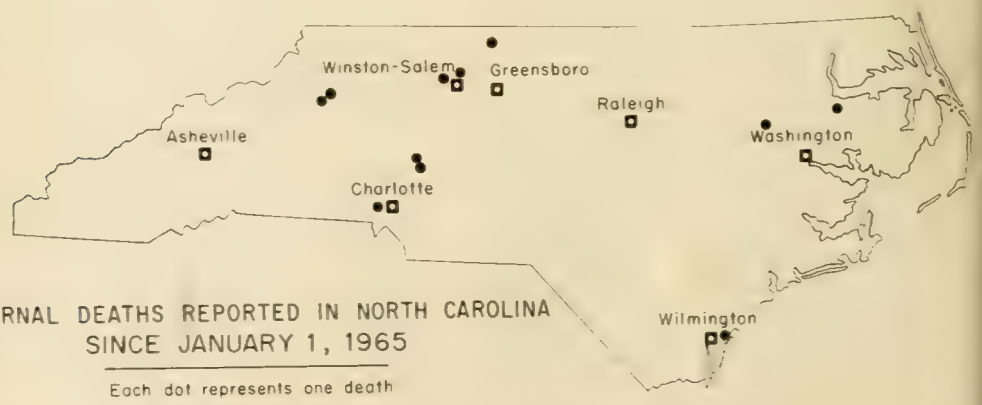
Physicians Serving In 21 Legislatures

Physicians are serving in the legislatures of 21 of the nation's states.

Georgia, with six physicians in its House of Representatives, is the leader in the number of doctors holding state legislative office.

A survey by The AMA News, publication of the American Medical Association, shows that nine other states have one physician-lawmaker, 10 have two, and Virginia has four. Three doctors are members of Puerto Rico's legislative body.

North Carolina was among the states reporting no physicians in their legislatures.



Supplement to

NORTH CAROLINA MEDICAL JOURNAL

April, 1965

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TRANSACTIONS

ONE HUNDRED TENTH ANNUAL SESSION

of

The Medical Society of the State

of North Carolina

held at

Greensboro, North Carolina

May 2-6, 1964

BRIEFED AND ABRIDGED BY JAMES T. BARNES, EXECUTIVE DIRECTOR
203 CAPITAL CLUB BUILDING, RALEIGH, N. C.

1964

TRANSACTIONS

OF THE

MEDICAL SOCIETY
OF THE STATE OF NORTH CAROLINA

One Hundred Tenth Annual Session

held at

Greensboro, North Carolina
May 2 to 6, 1964

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OFFICERS — 1964-1965

President—THEODORE S. RAIFORD, M.D., Asheville
President-Elect—GEORGE W. PASCHAL, JR., M.D., Raleigh
First Vice-President—HUBERT MCN. POTEAT, JR., M.D., Smithfield
Second Vice-President—WAYNE J. BENTON, M.D., Greensboro
Secretary—CHARLES W. STYRON, M.D., Raleigh
Speaker—JOHN C. REECE, M.D., Morganton
Vice-Speaker—D. E. WARD, JR., M.D., Lumberton
Past President—JOHN S. RHODES, M.D., Raleigh
Executive Director—MR. JAMES T. BARNES, Raleigh

COUNCILORS — 1964-1967

First District—THOMAS P. BRINN, M.D., 118 W. Market St., Hertford
VICE COUNCILOR—WILLIAM H. ROMM, M.D., Box 26, Moyock
Second District—LYNWOOD E. WILLIAMS, M.D., Kinston Clinic, Kinston
VICE COUNCILOR—ERNEST W. LARKINS, JR., M.D., 211 N. Market St., Washington
Third District—DEWEY H. BRIDGER, M.D., Bladenboro
VICE COUNCILOR—FRANK R. REYNOLDS, M.D., 1613 Dock St., Wilmington
Fourth District—EDGAR T. BEDDINGFIELD, JR., M.D., P. O. Box 137, Stantonsburg
VICE COUNCILOR—HARRY H. WEATHERS, M.D., Central Med. Clin., Roanoke Rapids
Fifth District—HARRY H. SUMMERLIN, M.D., 203 Atkinson St., Laurinburg
VICE COUNCILOR—CHARLES A. SPEAS PHILLIPS, M.D., Pinehurst Surgical Clinic, Pinehurst
Sixth District—JOHN GLASSON, M.D., 306 S. Gregson St., Durham
VICE COUNCILOR—FRED G. PATTERSON, M.D., 1001 S. Hamilton Rd., Chapel Hill
Seventh District—DAVID G. WELTON, M.D., 1012 Kings Drive, Charlotte
VICE COUNCILOR—CHARLES L. STUCKEY, M.D., 1515 Elizabeth Ave., Charlotte
Eighth District—LOUIS DESHAFFNER, M.D., 300 S. Hawthorne Rd., Winston-Salem
VICE COUNCILOR—CLAUDE A. MCNEILL, JR., M.D., 121 Church St., Elkin
Ninth District—THOMAS L. MURPHY, M.D., 116 Rutherford St., Salisbury
VICE COUNCILOR—PAUL MCN. DEATON, M.D., 766 Hartness Rd., Statesville
Tenth District—JAMES S. RAPER, M.D., 103 Doctors Bldg., Asheville
VICE COUNCILOR—W. OTIS DUCK, M.D., Drawer 517, Mars Hill

SECTION CHAIRMEN — 1964-1965

General Practice of Medicine—JAMES B. GREENWOOD, JR., M.D., 4101 Central Ave., Charlotte
Internal Medicine—WILLIAM B. YOUNG, M.D., 103 N. Pine St., Wilson
Ophthalmology and Otolaryngology—RUTH LEONARD, M.D., 106 W. 7th St., Charlotte 2
Surgery—JAMES R. DUNN, JR., M.D., Tarboro Clinic, Tarboro
Pediatrics—GEORGE E. PRINCE, M.D., 318 South St., Gastonia
Obstetrics and Gynecoolgy—R. PINKNEY RANKIN, JR., M.D., 225 Hawthorne Lane, Charlotte 4
Public Health and Education—WILLIAM L. WILSON, M.D., State Bd., of Health, Raleigh
Neurology and Psychiatry—THOMAS H. WRIGHT, JR., M.D., 207 Doctors Bldg., Charlotte
Radiology—SIMMONS I. PATRICK, M.D., 400 Glenwood Ave., Kinston
Pathology—KENNETH M. BRINKHOUS, M.D., University of N. C., Chapel Hill
Anesthesiology—MICHEL BOURGEOIS-GAVARDIN, M.D., Watts Hospital, Durham
Orthopaedics and Traumatology—CHARLES HIGHSMITH, M.D., Montgomery Memorial Hospital, Troy
Student AMA Chapters—MR. E. J. HOCUTT, UNC School of Medicine, Chapel Hill

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1964 COMPILATIONS of ANNUAL REPORTS

REPORT OF THE SECRERTARY

The enrolled membership December, 1963, was 3,429 representing an increase for the year of 76 members.

The Society has had an active and progressive year under the leadership of the immediate past president, Dr. John R. Kernodle, and the president, Dr. John S. Rhodes. There have been outstanding accomplishments in the legislative area and in mental health, the details of which are embodied in this report. There is gradual expansion of government in the field of medical care both at the federal and state level, and there is continued pressure for medical care, particularly for the aged, under social security. It is hoped that implementation of the Kerr-Mills bill by the various states will answer the problems in this area in a satisfactory fashion. The interest and participation of private insurance companies in the older age group will undoubtedly be an important factor in argument against federal care under social security.

Reports of the various committees included in this annual report are illustrative of the energy and talent given to the activity of the Society by its various members. Committee members are congratulated on the excellent work done for the Society and for fellow members in the past year.

The Society mourned the loss of a former president and the first and only editor of the Journal, Wingate Johnson, M.D. The Society has been fortunate to have a member of such great talent, working in its behalf, for many years.

The Headquarters office under the leadership of the executive director, James T. Barnes, has functioned efficiently and well and in a fiscally sound manner. The executive director and his staff are to be commended on the outstanding service rendered to the Society.

Charles W. Styron, M.D.
Secretary

AUDITOR'S REPORT

MEDICAL SOCIETY OF THE STATE
OF NORTH CAROLINA, INCORPORATED
Raleigh, North Carolina
12 Months Ended December 31, 1963

OFFICERS.

Dr. John S. Rhodes — President
Raleigh, N. C.

Dr. Theodore S. Raiford — President-Elect
Asheville, N. C.

Dr. John R. Kernodle — Past President
Burlington, N. C.

Dr. William F. Hollister — First Vice President
Pinehurst, N. C.

Dr. Fred G. Patterson — Second Vice President
Chapel Hill, N. C.

Dr. Charles W. Styron — Secretary
Raleigh, N. C.

Dr. John C. Reece — Speaker of the House
Morganton, N. C.

Dr. Wayne J. Benton — Vice Speaker of the House
Greensboro, N. C.

Mr. James T. Barnes — Executive Director
Raleigh, N. C.

Chairman and Members of the Finance Committee
Medical Society of the State of North Carolina, Inc.
Raleigh, North Carolina

Gentlemen:

Pursuant to engagement, we have audited the books and records of the Medical Society of the State of North Carolina, Inc., Raleigh, North Carolina, for the period beginning January 1, 1963, and ending December 31, 1963, and present herewith our report.

Exhibits and Schedules

In presenting to you our findings, as the result of the audit, we have prepared four Exhibits and three Schedules, as outlined in the Index, which are attached hereto as a part of this report.

Balance Sheet—Exhibit "A":

The first statement is a list of the Assets, Liabilities, Reserves and Fund Balances, which we designate as Balance Sheet, December 31, 1963, Exhibit "A." This statement has been divided into two sections. One contains the Current Operating Fund, which represents the Current Assets, Liabilities and Reserves. The other has been designated as a Capital or Non-Operating Fund containing the office equipment, real estate and capital stock owned and used by the Medical Society—at estimated values established in a prior year plus actual cost for purchases during the last twelve years.

The Cash on Hand and in Bank is made up of $50.00 Petty Cash Fund, Cash on Hand of $49.09, and $8,146.53 in the First-Citizens Bank and Trust Company, Raleigh, North Carolina. The Cash in Bank was verified through a reconciliation of the balances as shown by the records of the Medical Society with a certificate which was obtained independently from the bank. This reconciliation is shown in detail in Schedule - 1 of this report.

Accounts Receivable—Regular in the amount of $2,637.53 are shown on the Balance Sheet and, in the main, represents the total of several uncollected balances due for local advertising in the State Medical Journal. Verifications were forwarded on these accounts and all differences reported were reconciled satisfactorily.

Accounts Receivable—National Advertising in the amount of $6,037.84 represent November and December, 1963, National Advertising in the State Medical Journal. These amounts were confirmed directly with the State Medical Journal Advertising Bureau. The November amount was received in January, 1964.

Prepaid Expenses and Supplies in the amount of $262.50 represent Expenses paid prior to December 31, 1963, but applicable to the operations of the year 1964.

The investment in Mutual Fund stocks is shown at cost value of $123,669.93. This represents the cost of 11,454.347 shares at $10.79 per share. During the year under audit $6,529.63 in dividends earned was invested in this stock. The value of this investment at December 31, 1963, was $11.64 per share or a total value of $133,328.60.

Air Travel Deposit of $425.00 is cash deposited with Eastern Airlines in order to secure air travel credit cards.

The real estate, capital stock and office equipment and furniture shown on the Balance Sheet in the amount of $56,454.23 is listed in detail in Schedule - 2. This represents an estimate made in a prior year which has been adjusted for purchases made during the last twelve years. The items shown represent cost value of the equipment to the Medical Society as no depreciation has been recorded. As there were no liabilities outstanding against this equipment, we have shown the entire amount as Fund Balances - Capital Fund - in the Balance Sheet.

Under the "Liabiilties" section we have listed those accounts, expenses, etc., incurred prior to December 31, 1963, for which statements or accounts were rendered or for which payment was due.

The Accounts Payable - Trade, in the amount of $24,648.11, represents unpaid accounts at December 31, 1963. These were confirmed on a test basis with the creditors by the use of positive verifications. These unpaid accounts are for Journal and Roster publication, $10,190.00, legal fees, $10,122.95 and other expense, $4,335.16. Most of these items were paid during the course of the audit.

The $1,740.00, Dues to be Refunded, represents State dues collected which are refundable to the members. The $1,377.50, "Due American Medical Association," is 1964 A. M. A. dues collected in 1963. The $182.50, "American Medical Association Dues In Escrow," represents dues paid to the State Society but which cannot be remitted to the National Society at the time due to diverse qualifying reasons. The pay roll taxes, $189.16, for the Society's Social Security and $1,279.48 for employees' Social Security and Withholding, were paid during the course of the audit. The $71.60, "Due Hospital Savings Association," represents amount withheld from employees' salaries for hospital insurance during the last quarter of 1963 but unremitted at December 31, 1963.

The deferred credits of $6,252.50 are for payments of $3,325.00 received on technical exhibits space at the 1964 Convention, $937.50 on 1964 Convention Banquet, and $1,990.00 on 1964 membership dues. These remittances were received in 1963 and will be transferred to the income accounts in 1964.

The Reserve for Mental Hygiene of $5,000.00 is a reserve to cover expenses and costs of the said committee in its rehabilitation work.

The Reserve for Raymond Randolph Scholarship Fund of $280.00 represents a reserve for the 1955 Essay Contest Winner, Raymond Randolph, Henderson, North Carolina. This amount is held in escrow for payment to the college of his choice, in accordance with the contest rules.

The Reserve for Medical Building Site represents the unexpended portion of the $30,723.00 received from the sale of Series "F" Bonds. The expended portion of this fund is $26,104.55 and is set out in Schedule - 3 of this report. This leaves a balance of $4,618.45 not disbursed to date.

The Fund Balance section of the Balance Sheet is comprised of two figures, $95,639.12 being the balance of the Current Operating Fund for the year, and $56,454.23 representing the balance of Capital Fund.

Statement of Fund Balances - Exhibit "B":

The second statement is an analysis of the changes in Fund Balances during the year.

The Current Operating Fund Balance was arrived at by adding to the balance January 1, 1963, of $97,019.49, the amount of Dividends from investments used to purchase additional shares of $6,529.63; subtracting the Net Deficit from operations for the current year of $5,893.13, expenditures for Capital Fund - $1,537.10 and adjustment for 1962 of $95,639.12 at December 31, 1963.

The Capital Fund Balance is derived from adding National Advertising - $479.77, leaving a balance purchases during the year from operating funds for Capital Assets in the amount of $1,537.10 to the balance January 1, 1963, of $55,354.88.

Statement of Income and Expenses - Exhibit "C":

A statement showing a budget comparison of the income and expenses for the twelve-months period is given in Exhibit "C". This statement is, in effect, a statement of operations for the year, and by examination it will be seen that the Expenses of $220,954.32 exceeded the income of $213,524.09 by $7,430.23. However, there was included in the expenses $1,537.10 in Capital Expenditures for Equipment. Eliminating these we show a deficit from operations of $5,893.13.

In comparison with the Budget, actual income was less than the Budget anticipated by $12,080.91. The main items accounting for this are $4,743.50 less from National Journal Advertising, $2,630.55 more from Local Journal Advertising, $4,957.50 more from Membership Dues and $14,399.04 less from Unexpected Revenue.

Further examination reveals that the total actual expenses were $12,758.68 less than the budget provision. The Journal Budget had over-expenditures of $2,728.66 and the Annual Sessions Convention Budget was over spent $375.72. All other budget classifications show under-expenditures for the year.

Cash Receipts and Disbursements - Exhibit "D":

A statement showing in detail the cash receipts and disbursements of the Society during the year under review is shown in Exhibit "D" which we summarize as follows:

Cash Balance January 1, 1963		$ 4,502.31
Cash Receipts During the Year		371,754.00
Total Cash Available		$376,256.31
Less: Disbursements During the Year:		
For Operations	$216,263.81	
To A. M. A. - Dues	131,730.00	
For Capital Expenditures	1,537.10	
Refunds of Collections For Proposed European Tour	18,479.78	368,010.69
Cash Balance December 31, 1963		$ 8,245.62

We made a careful analysis of the cash transactions and, where practicable, traced the receipts to their original source. Disbursements for expenses were supported by cancelled checks and invoices issued in the regular course of business. We believe the funds have all been accounted for.

General Comments

A surety bond covering faithful performance of Mr. James T. Barnes, Executive Director, in the amount of $50,000.00, is in force, held by the Medi-

cal Society and was examined by us. We also examined and found in force a Primary Commercial Blanket Honesty Bond in the amount of $25,000.00; a fire insurance policy - with 80% co-insurance clause - covering fire loss on office equipment, books and records in the office of the Executive Director, Raleigh, North Carolina, in the amount of $20,000.00; an Automobile Schedule Policy; a Standard Workmen's Compensation and Employer's Liability Policy; and a Compresensive General Liability Policy.

As noted under Miscellaneous Budget - Employees' Retirement System (G-5) payments of $847.60 on the Pension Plan of the Society were made during the current year to Penn Mutual Life Insurance Company. This amount is the net expense to the Society for the year. The premium due under the plan was $3,589.36, but during the year an employee covered under the plan resigned from the Society and purchased her plan from Penn Mutual Life Insurance Company for $2,741.76. The Society was given credit for this amount, thus reducing the net cost of the plan for the year to $847.60. At December 31, 1963, there were four employees eligible and covered under this plan. The plan became effective October 15, 1957, for employees who are full time permanent employees between the ages of twenty-five and fifty-five and have three years of continuous service if employed before October 15, 1957, or four years of continuous service if employed after October 15, 1957.

We were extended every courtesy and cooperation during the course of the audit and we experienced no trouble in obtaining the necessary information for this report.

Scope of Examination and Opinion

We have examined the balance sheet of the Medical Society of the State of North Carolina, Incorporated, as of December 31, 1963, and the related statements of income and expense and net worth for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying balance sheet and statements of income and expense and net worth present fairly the financial position of the Medical Society of the State of North Carolina, Incorporated, at December 31, 1963, and the results of its operations for the year then ended, in conformity with generally accepted accounting principles for non-profit organizations applied on a basis consistent with that of the preceding year.

Very truly yours,

A. T. ALLEN & COMPANY
CERTIFIED PUBLIC ACCOUNTANTS
A. T. Allen
Certified Public Accountant

Raleigh, N. C. January 15, 1964

MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA, INCORPORATED

Raleigh, North Carolina

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Statement of Fund Balances ..... Exhibit "B"
Statement of Income and Expenses ..... Exhibit "C"
Cash Receipts and Disbursements ..... Exhibit "D"

SCHEDULES

Cash on Hand and In Bank ..... Schedule—1
Schedule of Capital Assets ..... Schedule—2
Schedule of Building Site Costs ..... Schedule—3

December 31, 1963

EXHIBIT A

ASSETS

CURRENT OPERATING FUND:		
Cash on Hand and In Banks—(Schedule -1)	$ 8,245.62	
Accounts Receivable—Regular	2,637.53	
Accounts Receivable—National Advertising	6,037.84	
Prepaid Expenses and Supplies	262.50	
Air Travel Deposit	425.00	
Investment in Mutual Fund Stocks	123,669.93	
TOTAL CURRENT OPERATING FUND		$141,278.42
CAPITAL OR NON-OPERATING FUND—(SCHEDULE—2):		
Real Estate	$ 26,104.55	
Office Furniture and Fixtures	30,149.68	
Capital Stock, Common—State Medical Journal Advertising Bureau	200.00	
TOTAL CAPITAL OR NON-OPERATING FUND		$ 56,454.23
TOTAL ASSETS		$197,732.65
LIABILITIES, RESERVES AND NET WORTH:		
LIABILITIES:		
Accounts Payable—Trade	$ 24,648.11	
Dues to Be Refunded	1,740.00	
Due American Medical Association	1,377.50	
Due American Medical Association—Dues In Escrow	182.50	
Federal and State Income Taxes Withheld	1,279.48	
Pay Roll Taxes Payable	189.16	
Due Hospital Saving Association	71.60	
TOTAL LIABILITIES		$ 29,488.35
DEFERRED CREDITS:		
Advance Payment on Technical Exhibit Space at 1964 Convention	$ 3,325 00	
Advance Payments on 1964 Convention Banquet	937.50	
Advance Payments on 1964 Membership Dues	1,990.00	
TOTAL DEFERRED CREDITS		$ 6,252.50
RESERVES:		
Reserve for Mental Hygiene Committee	$ 5,000.00	
Reserve for Raymond Randolph Scholarship Fund	280.00	
Reserve for Medical Building Site	4,618.45	
TOTAL RESERVES		$ 9,898.45
FUND BALANCES:		
Current Operating Fund—(Exhibit "B")	$ 95,639.12	
Capital Fund—(Exhibit "B")	56,454.23	
TOTAL FUND BALANCES		152,093.35
TOTAL LIABILITIES, RESERVES AND NET WORTH		$197,732.65

EXHIBIT "B"

STATEMENT OF FUND BALANCES

CURRENT OPERATING FUND:	
Balance—January 1, 1963	$ 97,019.49
Add: Increase in Investment—Dividends on Stock of Investors Mutual, Inc., Used to Purchase Additional Shares	6,529.63
TOTAL	$103,549.12

Less: Net Deficit from Operations	$ 5,893.13		
Expenditures for Capital Fund	1,537.10		
Adjustment to National Advertising Account for 1962	479.77	7,910.00	
TOTAL CURRENT OPERATING FUND—TO EXHIBIT "A"			$ 95,639.12
CAPITAL FUND:			
Balance—January 1, 1963		$ 55,354.88	
Add: Purchases Made Through Current Fund		1,537.10	
TOTAL		$ 56,891.98	
Less: Items Traded on New Assets		437.75	
TOTAL CAPITAL FUND—TO EXHIBIT "A"			56,454.23
TOTAL FUND BALANCES—DECEMBER 31, 1963			$152,093.35

EXHIBIT "C"

STATEMENT OF INCOME AND EXPENSES

12 Months Ended December 31, 1963

	Budget Provisions	Actual	Difference Over or (Under)
INCOME:			
Membership Dues—Current and Prior Years	$146,700.00	$151,657.50	$ 4,957.50
Sales of Journals, Rosters and Value Scales	1,400.00	1,684.65	284.65
Author Contributions to Cuts	300.00	222.83	(77.17)
Revenue Unexpected	14,900.00	500.96	(14,399.04)
Sales of Technical Exhibit Space	17,000.00	16,489.00	(511.00)
Journal Advertising —Local	6,000.00	8,630.55	2,630.55
Journal Advertising —National	35,000.00	30,256.50	(4,743.50)
Commission (1%) from AMA for Dues Collected	1,305.00	1,319.60	14.60
Ticket Sales—1963 Convention Banquet	3,000.00	2,762.50	(237.50)
TOTAL INCOME	$225,605.00	$213,524.09	$(12,080.91)
EXPENSES:			
Executive Budget:			
A-1 Expense—President	$ 4,000.00	$ 3,672.80	$ 327.20
A-3 Travel—Secretary	700.00	259.99	440.01
A-4 Salary—Executive Director	15,000.00	15,000.00	—0—
A-5 Travel—Executive Director	5,000.00	5,000.00	—0—
A-6 Clerical Assistants — Office	23,670.00	23,270.00	400.00
A-7 Equipment—Office	1,000.00	642.61	357.39
A-8 Expenses—Office	9,000.00	8,210.99	789.01
A-9 Bonding	843.00	914.25	(71.25)
A-10 Auditing	700.00	671.00	29.00
A-11 Pay Roll Taxes	997.00	952.66	44.34
A-12 Insurance	176.00	224.57	(48.57)
A-13 Membership Record System	50.00	8.81	41.19
A-14 Publications, Reports and Executive Aids	200.00	131.89	68.11
A-15 Insurable: Interest Insurance and Retirement Plan	1,370.00	1,370.80	(80)
Total Executive Budget	$ 62,706.00	$ 60,330.37	$ 2,375.63
Journal Budget:			
B-1 Publication of Journal	$ 50,000.00	$ 52,689.03	$(2,689.03
B-2 Cuts for Journal	600.00	552.66	47.34
B-3 Salary—Editor	2,310.00	2,310.00	—0—
B-4 Salary—Assistant Editor	4,080.00	4,080.00	—0—
B-5 Expenses—Editorial Office	450.00	343.30	106.70
B-6 Expenses—Business Manager's Office	300.00	346.05	(46.05)
B-7 Equipment—Business Manager's Office	—0—	146.24	(146.24)
B-8 Travel for Journal	200.00	165.29	34.71
B-9 Pay Roll Taxes	232.00	231.48	.52
B-10 Sales Tax on Journal and Roster Sales	450.00	486.61	(36.61)
Total Journal Budget	$ 58,622.00	$ 61,350.66	$(2,728.66)
Forwarded:			
Intra-Functional Activity Budget:			
C-1 Expenses—Executive Council	$ 2,500.00	$ 2,241.76	$ 258.24
C-2 Expenses—Councilors	60.00	13.30	46.70
C-3 Expenses—Legislative Committees	7,000	5,270.39	1,729.61
C-4 Expenses—Maternal Health Committee	3,600.00	3,600.00	—0—
C-7 Expenses—Scientific Exhibits Committee	410.00	15.39	394.61
C-8 Expenses—Mental Health Committee	400.00	224.72	175.28
C-9 Expenses—Grievances Committee	200.00	1.32	198.68
C-10 Expenses—Chronic Illness Committee	2,500.00	1,581.16	918.84
C-11 Expenses—Committees in General	2,500.00	2,207.22	292.78
C-13 Expenses—Occupational Health Committee	400.00	425.44	(25.44)
C-15 Expenses—Child Health Committee	—0—	—0—	—0—
C-16 Expenses—Negotiations Committee	—0—	—0—	—0—
C-17 Expenses—Student AMA Committee	1,585.00	991.44	593.56
C-18 Expenses—Military and Emergency Medical Service Committee	400.00	30.40	369.60
C-19 Expenses—Industrial Commission Committee	100.00	24.76	75.24
C-20 Expenses—Constitution and By-Laws Committee	—0—	—0—	—0—
C-21 Expenses—Medical Legal Committee	100.00	504.21	(404.51)
C-22 Expenses—Traffic Safety Committee	100.00	—0—	100.00
C-23 Expenses—Venereal Disease Committee	100.00	—0—	100.00
C-24 Expenses—Integration of Scientific Members Committee	125.00	7.85	117.15
C-25 Expenses—National Legislative Committee	—0—	—0—	—0—
C-26 Expenses—Anesthesia Study Committee	400.00	400.00	—0—
C-27 Expenses—Blue Shield Deputation to National Blue Shield	200.00	11.84	188.16
C-28 Expenses—Blue Shield Committee	300.00	100.25	199.95
C-29 Expenses—School Health Committee	300.00	326.52	(26.52)
C-30 Expenses—N. C. Board of Public Welfare Advisory Committee	150.00	9.00	141.00
C-31 Expenses—Post Graduate Medical Study Committee	100.00	—0—	100.00
C-32 Expenses—Insurance Industry Liaison Committee	1,069.00	299.24	769.76
C-33 Expenses—Polio Campaign	1,500.00	8.42	1,491.58
Total Intra-Functional Activity Budget	$ 26,099.00	$ 18,294.73	$ 7,804.27
Forwarded:			
Extra Functional Activities Budget:			
D-1 Expenses—Delegates to AMA	$ 3,681.00	$ 3,670.64	$ 10.36
D-2 Conference Dues	100.00	122.50	(22.50)
D-3 Woman's Auxiliary	1,985.00	1,578.11	406.89

Total Extra Functional Activities Budget	$ 5,766.00	$ 5,371.25	$ 394.75
Public Relations Budget:			
E-1 Salary, Assistant Executive Director	$ 10,000.00	$ 10,000.00	$ —0—
E-2 Travel, Assistant Executive Director	1,800.00	2,191.92	(391 92)
E-3 Committee Chairman, Out of State Travel	600.00	493.18	106.82
E-4 Secretarial Assistance	4,500.00	2,775.19	1,724.81
E-5 Equipment	750.00	748.25	1.75
E-6 Expenses, Office	5,0000.00	4,454.48	545.52
E-7 Pay Roll Taxes	278.00	274.29	3.71
E-8 Publications and Executive Aids	100.00	121.71	(21.71)
E-9 Audio-Visual Depiction	300.00	176.51	123.49
E-10 Educational Distributions	1,000.00	185.66	814.34
E-11 News and Press Releases	350.00	348.52	1.48
E-12 Public Relations Bulletin	2,400.00	2,390.04	9.96
E-13 State High School Science Fair Program	200.00	212.84	(12.84)
E-14 Exhibits and Displays	650.00	603.90	46.10
E-15 Annual Officers Conference	1,000.00	1,045.54	(45.54)
E-16 Physicians Press Award	300.00	357.59	(57.59)
E-17 Public and Personified Activities	600.00	631.75	(31.75)
E-18 Collateral Public Relations	300.00	—0 -	300.00
Total Public Relations Budget	$ 30,128.00	$ 27,011.37	$ 3,116.63
Annual Sessions (109th) Convention Budget:			
F-1 Programs	$ 2,000.00	$ 1,651.98	$ 348.02
F-2 Hotel and Auditorium Expense	2,000.00	2,345.98	(345.98)
F-3 Expenses—Publicity Promotion	500.00	732.18	(232.18)
F-4 Entertainment	800.00	878.92	(78.92)
F-5 Orchestra and Floor Entertainment	2,250.00	1,250.00	1,000.00
F-6 Guest Speakers	1,000.00	755.99	244.01
F-7 Banquet Speaker	200.00	319.72	(119.72)
F-8 Electric Amplification	100.00	126.00	(26.00)
F-9 Booth Installation and Supplies	5,000.00	5,700.14	(700.14)
F-10 Projection Expense	500.00	773.10	(273.10)
F-11 Badges	100.00	226.19	(126.19)
F-12 Transactions Reporting Service	1,100.00	1,103.95	(3.95)
F-13 Rental—Extra Facilities	250.00	254.18	(4.18)
F-14 Exhibitors Entertainment	1,400.00	1,487.00	(87.00)
F-15 Banquet Expense	3,000.00	2,933.39	66.61
F-16 Police Security	250.00	287.00	(37.00)
Total Annual Sessions (109th) Convention Budget	$ 20,450.00	$ 20,825.72	$(375.72)
Miscellaneous Budget:			
G-1 Legal Counsel	$ 8,000.00	$ 10,575.36	$(2,575.36)
G-2 Reporting (Executive Council, etc.)	1,500.00	1,748.52	(248.52)
G-3 Fifty Year Club	200.00	160.85	39.15
G-4 Contingency and Emergency	1,200.00	596.14	603.86
G-5 Employees Retirement System	3,630.00	847.60	2,782.40
G-6 Ad valorem Taxes	280.00	307.87	(27.87)
G-7 Association of Professions Loan	500.00	500.00	—0—
G-8 N. C. Hospital Association Recruitment Program	—0—	500.00	(500.00)
G-9 Association of American Medical Colleges	400.00	224.14	177.86
Total Miscellaneous Budget	$ 15,710.00	$ 15,458.48	$ 251.52
Rural Health Function Budget:			
H-1 Expense—Committee Chairman	$ 300.00	$ 142.77	$ 157.23
H-2 Salary—Rural Health Consultant	6,900.00	5,950.02	949.98
H-3 Travel—Rural Health Consultant	2,000.00	2,224.28	(224.28)
H-4 Clerical Assistant—Part Time	1,600.00	1,590.00	10.00
H-5 Taxes—Pay Roll	232.00	273.30	(41.30)
H-6 Rural Health Conferences	400.00	—0—	400.00
H-7 Office Expenses	2,000.00	1,928.48	71.52
H-8 4-H Club Activities	500.00	165.00	335.00
H-9 Educational Displays	200.00	—0—	200.00
H-10 Dues—Rural Health Safety Council	100.00	37.89	62.11
Total Rural Health Function Budget	$ 14,232.00	$ 12,311.74	$ 1,920.26
TOTAL EXPENSES	$233,713.00	$220,954.32	$ 12,758.68

SUMMARY

TOTAL INCOME		$213,524.09
Less: Expenses:		
Executive Budget	$ 60,330.37	
Journal Budget	61,350.66	
Intra-Functional Activity Budget	18,294.73	
Extra Functional Activities Budget	5,371.25	
Public Relations Budget	27,011.37	
Annual Sessions (109th) Convention Budget	20,825.72	
Miscellaneous Budget	15,458.48	
Rural Health Function Budget	12,311.74	220,954.32
EXCESS OF EXPENSE OVER INCOME		$ 7,430.23
Less: Capital Expenditures from Current Funds		1,537.10
NET DEFICIT FROM OPERATIONS		$ 5,893.13

EXHIBIT "D"

CASH RECEIPTS AND DISBURSEMENTS
12 Months Ended December 31, 1963

RECEIPTS

CASH RECEIVED FROM REGULAR OPERATIONS:		
Members' Dues—Current and Prior Years	$153,622.50	
Medical Journal Advertising—Local	7,965.53	
Medical Journal Advertising—National	29,360.82	
Sale of Exhibit Space—1963 Convention	13,494.00	
Sale of Exhibit Space—1964 Convention	3,325.00	
Medical Journal Subscriptions and Sales of Rosters and Value Scales	1,922.42	
Author's Contributions to Cost of Cuts	201.33	
Commission (1%) from AMA for Collecting National Dues	1,319.60	
Unexpected Revenue	459.18	
Over Collection of Dues—Later Refunded	2,592.63	
Reimbursements for Items Paid by the Society	1,755.76	
Miscellaneous Refunds	840.45	
TOTAL CASH RECEIVED FROM REGULAR OPERATIONS		$216,859.22
AMERICAN MEDICAL ASSOCIATION—REGULAR DUES COLLECTED		133,115.00
AMERICAN MEDICAL ASSOCIATION—DUES PLACED IN ESCROW		95.00
RECEIPTS FROM 1963 CONVENTION BANQUET		2,267.50
RECEIPTS FOR 1964 CONVENTION BANQUET		937.50
COLLECTIONS FOR PROPOSED EUROPEAN TOUR		18,479.78
TOTAL RECEIPTS		$371,754.00
CASH BALANCES—JANUARY 1, 1963:		
First-Citizens Bank & Trust Co., Raleigh, N. C.	$ 4,452.31	
Cash on Hand	50.00	4,502.31
TOTAL TO ACCOUNT FOR		$376,256.31

DISBURSEMENTS:

DISBURSEMENTS FOR CURRENT OPERATIONS:		
Expenditures—Executive Budget	$ 58,531.44	
Less: Capital Expenditures—Office Equipment	642.61	$ 57,888.83
Expenditures—Journal Budget	$ 61,424.12	
Less: Capital Expenditures—Office Equipment	146.24	61,277.88

Expenditures—Intra-Functional Activity Budget		18,046.40
Expenditures—Extra-Functional Activities Budget		6,077.61
Expenditures—Public Relations Budget	$ 26,533.93	
Less: Capital Expenditures—Office Equipment	748.25	25,785.68
Expenditures—Annual Sessions (109th) Convention Budget		22,276.26
Expenditures—Miscellaneous Budget		9,336.97
Expenditures—Rural Health Function Budget		12,500.05
Refunds of Dues Over Collected		837.63
Refunds of AMA Dues In Escrow		17.50
Refunds—Miscellaneous		1,325.21
Accrued Pay Roll Taxes—12-31-62		1,231.04
Accrued Hospital Insurance — 12-31-62		90.26
Items Paid by the Society—Billed to Others		1,018.14
Total		$217,709.46
Less: Deductions from Wages—Unpaid at 12-31-63:		
Pay Roll Taxes	$ 1,374.05	
Hospital Insurance	71.60	1,445.65
TOTAL DISBURSEMENTS—CURRENT OPERATIONS		$216,263.81
PAYMENTS TO AMERICAN MEDICAL ASSOCIATION—REGULAR DUES COLLECTED		131,730.00
EXPENDITURES FOR CAPITAL ASSETS		1,537.10
REFUND OF COLLECTIONS FOR PROPOSED EUROPEAN TOUR		18,479.78
TOTAL DISBURSEMENTS		$368,010.69
CASH BALANCES—DECEMBER 31, 1963:		
First-Citizens Bank & Trust Co., Raleigh, N. C.	$ 8,146.53	
Cash on Hand	99.09	8,245.62
TOTAL ACCOUNTED FOR		$376,256.31

SCHEDULE—1
CASH ON HAND AND IN BANK
December 31, 1963

FIRST-CITIZENS BANK AND TRUST COMPANY, RALEIGH, N. C.:		
Balance Per Bank Statement		$ 6,900.98
ADD: Error by Bank (Corrected 1-8-64)		1,391.55
TOTAL		$ 8,292.53
LESS, Outstanding Checks		
Number 10780	$ 5.00	
11158	75.00	
11561	13.00	
12164	5.00	
12201	48.00	
		146.00
BALANCE PER BOOKS		$ 8,146.53
CASH ON HAND		49.09
PETTY CASH FUND		50.00
TOTAL CASH—TO EXHIBIT "A"		$ 8,245.62

SCHEDULE 2
SCHEDULE OF CAPITAL ASSETS
December 31, 1963

OFFICE FURNITURE AND FIXTURES:	
EXECUTIVE OFFICE:	
Wooden File Case—Letter Size	$ 21.66
Typewriter Desk	25.00
Steel Office Safe	150.00
Steel File Case—Letter Size	20.00
Four Steel Card Files	20.00
Office Chair	35.20
One Desk	62.55
Steel Filing Cabinet	24.50
Office Desk	47.95
Letter File—Two Drawer	29.46
Steel Filing Cabinet	71.75
Office Chairs	40.00
Office Desk	87.29
Office Equipment—Miscellaneous	1,149.39
One Telephone Table—Wooden	15.45
Two Pairs 12" x 38" C. S. Vents and Brackets	8.77
One Desk Lamp	10.26
Two Master Model Audiographs and Attachments	725.67
One Map of Greater Carolinas	37.50
Two Double Files 3" x 5"	11.86
Three Pendaflex Frames (Installed)	5.57
Two Gray Steel Cabinets	103.00
Three Transfer Files	11.89
One Spec. B. Outfit File	7.25
Two Legal Filing Cabinets	19.90
One Filing Shelf	2.50
Plywood Carrying Case for Audiograph	17.00
Map Framed	3.61
Charter Framed	2.57
Cash Box	2.79
Steel Desk	158.98
Three Desk Trays with Stackers	8.57
Waste Basket	1.40
Large Chair Mat	9.27
Glass Desk Top	11.68
Stenograph and Tripod	100.70
Four Drawer Steel Filing Cabinet	78.03
Four Pendaflex Steel Frames (Installed)	7.42
Postal Scale	6.50
Numbering Machine	14.88
Filing Stool	11.23
Bookcase	63.86
Remington Rand Electric Adding Machine	215.01
Metal Storage Cabinet	78.28
Metal Filing Cabinet	92.76
Two Cabinet Shelves (Installed)	10.30
Metal Cash Box	2.32
Pro Rata Share of Cost of Mimeograph Machine	337.47
Typewriter Table	21.00
Metal Correspondence Separator	6.18
Metal File and Sections	68.55
Two Typewriters—Large Type (Bulletin)	321.23
Kardex File and Parts	1,842.36
Catalogue Case	20.00
Metal File and Frames	93.07
Electric Typewriter	477.00
Secretarial Foot Control	25.75
Three Transfer Files	16.23
Junior Pendaflex File	22.87
Book Case Section	26.25
Remington Electric Typewriter	290.30
Swivel Chair and Arm Chair	74.48
Audiograph Converter	28.84
Pendaflex File	5.88
Wood Desk and Two Files	281.43
Der Jur Camera with Flash Attachment and Case	100.44
Audiograph Machine—Used	300.00
Flight Bag	38.31
Three Box Files	9.42
Portable Lectern	29.93
Metal File	114.33
Checkwriter — Paymaster	101.48
Desk and Chair	268.45
Supply Cabinet Shelves	25.35
Pro Rata Share of Cost of Imperial Safe ED "60" (Kardex)	290.00
Air Conditioning Equipment—Office	1,621.00
Five-Drawer Letter File and Frames	122.78
Five Transfer Files	20.35
Two Five-Drawer Filing Cabinets	245.56
American Medical Dictionary	25.00
Two Plate Glass Tops for Desks	20.34
Desk, Swivel Chair and Desk Set	253.87
Remington Rand Electric Typewriter	430.59
Pro Rata Share of Cost—Varityper — Used	50.00
Pro Rata Share of Cost — A. B. Dick Offset Duplicator	1,602.27
Ten Pronto Files	46.87
Two Four-Drawer Durable File Cabinets	61.70
One Kardex File Safe and Base	593.28
Pro Rata Portion of Postage Mailing Machine	427.85
Pro Rata Portion of Robotyper	360.50
Pro Rata Portion of Perforator	121.03
Pro Rata Portion of One Table	18.47
Pro Rata Portion of Postal Scale	12.48
Stenorette Machine #215391	156.06
Stenorette Machine #219890	156.06
Two Transcribing Kits for Stenorettes	60.08
Telephone Adapter and Switch Box	17.66
Two Gray Legal Desk Trays	14.63
Book Case Section #813 Walnut	29.26

Gray Table #1808	49 59
Three Transcribing Kits for Stenorettes	89.75
Four Stetho Clips for Stenorettes	12.00
Documentor Electric Typewriter	372.55
Remington Electric Typewriter #E-2289256	360.21
Pro Rata Portion of Used Addressograph Machine #312185 with Work Table	75 00
Pro Rata Portion of Hand Truck	3.60
Pro Rata Portion of Two Gingher Valets - #7-6-U	26.59
Pro Rata Portion of Remington Electric Typewriter #2129420	153.83
Three Letter Size File Cabinets	103.72
One—TU-24 Stak Tube Roll File	40.00
Pro Rata Portion of One #11919 Paper Cutter	10.70
One—15 ft. x 16 ft. Rug and Mat	144.82
Pro Rata Portion of Five Tables	27.78
One—122H Steel Cart with 3 Shelves	35.76
One Brief Case	53.51
Six Four-Drawer Letter Size Files	199.31
One Documentor Electric Typewriter	372.55
One Modern Tub Chair	31.82
Two Bookcases	66.64
One Electric Projection Pointer	77.15
Two Side Arm Chairs, Walnut, Maroon Upholstery	77.62
Two Side Chairs, Walnut, Maroon Upholstery	55.62
One Desk and Chair	44.81
One Conference Table—Walnut	149.81
One Executive Swivel Chair, Walnut, Maroon Upholstery	104.37
One Endura Telephone Timer	13.11
One Walnut Credenza	125.30
Carpet	63.95
Two Glass Desk Tops	22.45
One Book Case (Used)	15.45
Pro Rata Portion of One Toledo Postage Scale (Used)	77:25
One 3-Section Book Case	137.61
Pro Rata Portion of One Divisumma 24 Calculator	100.00
Mirror—Secretary's Office	1.01
Portable Electric Baseboard Heater	17.82
Lamp for Conference Room	15.43
Drapes and Rods for Conference Room	114 75
Walnut Dictionary Stand	67.07
Costumer	12 98
Four Side Chairs	73.05
Stenorette Portable Dictating Machine and Case #35077	238.11
Pro Rata Portion of One Premier Ream Cutter	130.00
Checkwriter — #XL4-076960	45.05
Pro Rata Portion of One Flex-O-Build Desk End File	38.15
Pro Rata Portion of #1900 Addressograph	200.00
#502 Sort-A-Tray	9.95
Pro Rata Portion of Walnut Step Table	9.25
Pro Rata Portion of White Table Lamp	4.10
Pro Rata Portion of Black Settee	31.08
Pro Rata Portion of Postal Scale Rate Chart	16.13
Carrying Case for Adding Machine	18.49
Electric Fan	19.45
#412 File Unit	15.72
Pro Rata Portion of Verifax Copier	159.38
6-Tier File	8.72
Pro Rata Portion of 4-Drawer Letter File	130.91
Pro Rata Portion of #7795 Virco Desk	16.43
Pro Rata Portion of #4841 Thomas Collator	93.00
TOTAL EXECUTIVE OFFICE	$ 20,116.08

PUBLIC RELATIONS OFFICE:

Four Aluminum Desk Trays with Supports	$ 9.00
Steel Costumer	14.20
Cash Box	1.50
Supply Cabinet	37.00
Two Waste Baskets	7.00
Metal Executive Desk	112.60
Executive Chair	48.80
Two Side Arm Chairs	60.40
Metal Secretary Desk	136.40
Secretary Chair	30.20
Storage Cabinet	37.00
Two Chair Mats	12.90
Ringe Top Card File	1.60
Stapler	4.95
Punch	3.15
Metal Letter File with Lock	61.60
Storage Cabinet	37.00
Royal Typewriter	133.31
Two Electric Fans	63.29
Four-Drawer Metal File	69.49
Two-Drawer Metal File with Lock and Base	18.36
Supply Cabinet	75.00
Two Desk Trays and Stacks	4.64
Metal Storage Cabinet	57.29
Pro Rata Share of Cost of Mimeograph Machine	508.33
Pendaflex Frames (Installed)	4.64
Folder Machine and A. B Dick Stand	397.88
Used Elliott Addressograph	123.83
Two Telephone List Finders	6.06
Pendaflex Frame (Installed)	4.50
Used Projector - Nedco	153.43
Model DLS Screen	32.45
Record Player	101.25
Microphone and Stand	19.40
Projector with Case - Slide	94.47
Lectern Mike	56.85
Display Equipment - Flip Chart	31.74
One Camera and Flash	88.98
Film Holders and Adapters	19.00
Metal File	95.79
Pro Rata Share of Cost - Varityper - Used	50.00
Pro Rata Share of Cost - A. B. Dick Offset Duplicator	1,602.26
Pro Rata Portion of Postage Mailing Machine	427.85
Pro Rata Portion of Robotyper	360.50
Pro Rata Portion of Perforator	121.02
Pro Rata Portion of One Table	17.58
Pro Rata Portion of Postal Scale	12.47
Stenorette Machine #205817	205.06
Pro Rata Portion of Used Addressograph Machine #312185 with Work Table	75.00
Pro Rata Portion of Hand Truck	3.13
Pro Rata Portion of Two Gingher Valets - #7-6-U	8.83
Pro Rata Portion of One #11919 Paper Cutter	10.10
Pro Rata Portion of Five Tables	27.78
Two 4-Drawer Files Complete with Hanger Frames	194.47
Pro Rata Portion of One Toledo Postage Scale (Used)	77.25
One Underwood Scriptor Electric Typewriter - #21-8721980	337.64
Pro Rata Portion of One Divisumma 24 Calculator	327.79
Crestline DeLuxe Projector	79.26
Pro Rata Portion of One Premier Ream Cutter	129.47
Pro Rata Share of One Flex-O-Build Desk End File	13.00
Scriptor Electric Typewriter S#8654172	300.00
Pro Rata Portion of #1900 Addressograph	200.00
Pro Rata Portion of Walnut Step Table	9.24
Pro Rata Portion of White Table Lamp	4.09
Pro Rata Portion of Black Settee	30.67
Pro Rata Portion of Postal Scale Rate Chart	16.13
Pro Rata Portion of Verifax Copier	159.38
Pro Rata Portion of 4-Drawer Letter File	42.75
Pro Rata Portion of #7795 Virco Desk	15.00
Pro Rata Portion of #4841 Thomas Collator	60.99
TOTAL PUBLIC RELATIONS OFFICE	$ 7,694.79

JOURNAL BUSINESS MANAGER'S OFFICE:

Steel File and Frame	$ 88.27
Pro Rata Share of Cost of Imperial Safe ED "60" (Kardex)	170.77
Book - "Successful Sales Promotion"	5.65
Pro Rata Portion of Remington Electric Typewriter #2129420	153.83
Pro Rata Portion of Divisumma 24 Calculator	200.00
Pro Rata Portion of #1900 Addressograph	100.00

Pro Rata Portion of Verifax Copier	106.24	
TOTAL JOURNAL BUSINESS MANAGER'S OFFICE		824.76
RURAL HEALTH AND MEDICAL CARE COMMITTEE:		
Masco Tape Recorder	$ 159.18	
One Desk	185.40	
One Steel File and Trays	121.29	
One Soundscriber	150.00	
Pro Rata Portion of Two Gingher Valets - #7-6-U	8.83	
TOTAL RURAL HEALTH AND MEDICAL CARE COMMITTEE		624.70
ANNUAL SESSIONS CONVENTION:		
Portable Lectern	$ 29.67	
Stenorette Machine #219618	205.06	
Stenorette Machine #214740	$ 196.75	
Stenorette Machine #216837	196.75	
TOTAL ANNUAL SESSIONS CONVENTION		$ 628.23
INTRA-FUNCTIONAL ACTIVITIES:		
Gray Secretary's Desk	$ 224.35	
Gray Secretary's Chair	36.77	
TOTAL INTRA-FUNCTIONAL ACTIVITIES		261.12
TOTAL OFFICE FURNITURE AND FIXTURES		$ 30,149.68
REAL ESTATE:		
Land - Durham-Raleigh Highway - (Schedule - 3)		26,104.55
OTHER ASSETS.		
Capital Stock - State Medical Journal Advertising Bureau, Inc.		200.00
TOTAL CAPITAL ASSETS - TO EXHIBIT "A"		$ 56,454.23

SCHEDULE 3
SCHEDULE OF BUILDING SITE COSTS
12 Months Ended December 31, 1963

Options	$ 450.00
Land Purchase - Durham-Raleigh Highway	24,650.00
Legal Service	126.75
Survey and Map of Property	477.80
Architect Service	400.00
TOTAL - TO SCHEDULE - 2	$26,104.55

REPORT OF THE ASSISTANT EXECUTIVE DIRECTOR

William N. Hilliard

My efforts throughout the Society year have been exerted in behalf of whatever goals were set by the Society Officials and by the Committees to which staff duties have been assigned me. It is sincerely hoped that my efforts in this regard have proven productive.

Your Executive Director, Mr. James T. Barnes, has graciously given valuable guidance to my efforts that their overall direction might be properly coordinated with other activities of the Headquarters Staff. Wholehearted appreciation is expressed for his assistance.

My sincere thanks go also to the Chairman of the Public Relations Commission, Dr. H. Fleming Fuller, and to the several Committee Chairmen with whom a number of projects have been undertaken. Dr. Philip Naumoff as Chairman of the Committee on Public Relations has always been helpful with his wise guidance and helpfulness to Society activities.

The Conference of County Medical Society Officers and Committeemen was again sponsored by the Committee on Public Relations and held on Saturday, January 25, 1964, at the Carolina Hotel, Pinehurst, N. C. This conference involved considerable time and effort, principally in the winter period just before the first of the year and during January of the new year up to the date of the conference, in necessary preparation and arrangements. All indications seem to indicate that this year's conference was considered one of the best held to date, based on valuations submitted by those in attendance and by comments volunteered. In any case, it was the best attended conference to date, there being some 168 persons in attendance with 120 of those registered being physicians.

One of the features of the Officers Conference was the introduction of a new "Information Booklet for Physicians," designed primarily as orientation information for new members of the State Medical Society. The booklet is being made available to County Medical Societies particularly for presentation to new members who have joined the society within the past two years and for other members of the society on request.

Some time during each of the months of April, May, June and July was directed toward the objectives of the AMA sponsored "Operation Hometown" National Legislative campaign organization. During April there was participation in the preparation of material and arrangements for five Area Legislative Task Force meetings conducted in North Carolina aimed at the establishment of a statewide "Operation Hometown" organization. Representation from each county was requested at the area meetings, with County Campaign kits being distributed one per county for those present. During the latter part of May and during June and July the County Campaign kits were delivered to a medical society representative in each of the counties of the state not represented at the five area meetings.

Nine issues a year of the Public Relations Bulletin have been edited and published, monthly except for May, July and August. The device of enclosing material in the mailing with the Bulletin continues to be a popular method of reaching the Medical Society membership judging from the number of requests from various Committees of the Society for material to be disseminated in this manner.

The Annual Committee Conclave held September 26-28, 1963, was an intensive period of Committee Meetings, attending as staff assignment those Committee Meetings under the Public Relations Commission.

In the early weeks of 1964 a "Reference List of Medical Spokesmen" comprising the County Medical Society Presidents, Secretaries, and Chairmen of the County Committees on Public Relations was developed, printed and distributed to the newspapers throughout the state as a continuing effort in behalf of promoting mutual understanding between the medical profession and representatives of the information media.

An AMA exhibit on "Medicine as a Career" was arranged for display at four District Health Career Congresses in different parts of the state during the fall of 1963. Appropriate leaflets aimed at gain-

ing the interest of high school students were distributed in conjunction with the exhibit.

The North Carolina State Fair, October 14-19, 1963, had as one of the exhibits on display an AMA exhibit on "Digestion" sponsored for the Medical Society of the State of North Carolina by the Committee on Public Relations. In connection with the exhibit, a blood typing service was offered whereby patrons could have their blood type determined and receive a pocket size identification card indicating the individual's blood type. The blood typing was done in cooperation with the North Carolina Association of Medical Technologists, and the Wake County Auxiliary graciously furnished assistance for the distribution of educational literature and the registration of patrons of the blood typing service.

Press, radio and TV coverage was coordinated for two visits made to North Carolina during the past year by the President of the AMA, Dr. Edward R. Annis. He visited Winston-Salem, May 14-15, 1963, for the Insurance Institute and was in Raleigh on January 6, 1964, as the feature speaker for the Annual Chamber of Commerce Dinner. On both occasions there were opportunities for public exposure for Dr. Annis through the public information media.

The details of the Committee on Public Relations support and cooperation with the North Carolina Academy of Science and its sponsorship of the State High School Science Fair program have been worked out whereby a representative of the Biological Science Division of the State High School Science Fair is invited to display his or her exhibit at the Annual Meeting of the State Medical Society.

Continuing as a member of the Advisory Committee to the Director of the Communications Division of the AMA, regular quarterly meetings of the group have been attended at the AMA Headquarters in Chicago with the conviction that participation in these meetings has been informative and beneficial to work efforts in behalf of the State Medical Society.

It should be noted that County Public Relations Manuals are available to local societies on request, and in addition assistance to county medical societies is available from the headquarters office in planning and projecting local efforts, if such needs and desires will be expressed.

Quarterly meetings of the Insurance Industry Liaison Committee have been attended and assistance rendered wherever possible in this effort. As a joint effort between the Insurance Industry Liaison Committee of the State Medical Society and the North Carolina Committee of the Health Insurance Council, a system of review and arbitration on questions arising between suppliers of medical care and the insuring companies has been formulated and is known as the Insurance Claim Review Service (C.R.S.). A copy of the booklet giving details of the service along with a copy of the Rules, Regulations and Procedures of the service was distributed to the membership, however additional copies are still available on request from the State Medical Society.

Gift subscriptions to the AMA magazine **Today's Health** are being renewed for members of the N. C. General Assembly, Governor, Council of State, and Supreme and Superior Court Judges, as a project of the Committee on Public Relations in the name of the State Medical Society.

The 1963-64 high school forensic series chose as its topic "What should be the role of the federal government in providing medical care to the citizens of the United States?" In keeping with this topic a paperback booklet entitled "Federalized Health Care for the Aged?—A Critical Symposium" was distributed to Junior and Senior High School Libraries throughout the state. In addition another paperback book entitled "Financing Medical Care—An Appraisal of Foreign Programs" was distributed to any high school debaters requesting information from the Headquarters Office on the subject of medical care for the aged. More than a thousand copies of each booklet have been distributed in North Carolina during the last twelve months.

The two-day Annual American Medical Association Institute was attended in Chicago, Ill., August 22-23, 1963. Attendance at this session offered an excellent opportunity for the exchange of ideas with other persons employed in other states in a similar capacity as well as to listen to the formal presentations of the program and gain untold benefits for the Medical Society through the information gained at the meeting.

Out of state Conferences attended, in addition to those already referred to included the following: June 16-20, 1963, AMA Scientific Session, Atlantic City, N. J.; April 20-21, 1963, AMA Legislative Conference, Chicago, Ill.; and July 23, 1963, Legislative Committee visit to North Carolina Congressional Delegation in Washington, D. C.

In conclusion, we wish to emphasize that every effort will be continued to the end that the work of the Society may be effected for whatever goals may be set by the appropriate officials of the Society.

Statistical reference is made to the following tabulation with regard to the public relations mailings:

April 1, 1963 to April 1, 1964

Mail received	2,515
Mail dispatched	52,235
News Releases Mailed	8,757
Educational Pamphlets (503)	23,929
Public Relations Bulletins	33,949
Films	24
Radio Transcriptions	3
First Aid Charts (10)	2,244
Miscellaneous	200

Exhibits 10
Telephone Calls: 203
Long Distance (Est.) 1,020

William N. Hilliard
Assistant Executive Director

ANNUAL REPORT OF THE EDUCATION CONSULTANT

The building of a close working relationship between the doctors of North Carolina and the new State Department of Mental Health is one of the principal highlights of the Medical Society's work of the past year.

There is much to be done in the establishment of such a broad new program of mental health for North Carolina. There are many leaders in the Society who are actively working to encourage the acceptance of community-oriented mental health programs.

Much of the time of the education consultant since employment on July 1, 1963, has been spent with the Mental Health Committee and its five subcommittees. These committees have worked closely with the Department of Mental Health and the Mental Health Council's Program Project Staff.

A major result has been the production of a "Program Guide for County Medical Society Mental Health Committees." Another result has been a statewide conference of county mental health chairmen held in Raleigh March 14-15, 1964, to stimulate county activity in mental health programs.

The Medical Society's program on mental health attracted widespread attention at the Chicago Conference in February of State Medical Society Mental Health Representatives. Representatives from other states were intensely interested and asked many questions about the North Carolina program.

In work with the Committee on Chronic Illness, nursing home accreditation received major impetus in the past year. The committee was instrumental in action by the Executive Council to endorse and support the accreditation program of the National Council for the Accreditation of Nursing Homes.

The Chronic Illness Committee also was very active in promotion of home care programs. In my work with the committee, a visit was made to observe a home care program in Person County. Later a two-day "Shop Talk" was held in Raleigh on home care. It was taped and will be used in various meetings to stimulate interest in this program.

The education consultant is continuing the Area Conferences on Aging. A conference will be held in Eastern North Carolina in the early fall.

As emphasis has increased on rural health and its relation to poverty, the consultant has worked with agricultural organizations. These organizations are the Extension Service and the 4-H Clubs; Community Development groups; the N. C. Rural Safety Council; N. C. Farm Bureau and continued liaison with County Medical Society Rural Health Committees.

A specific health campaign which has been emphasized is the tetanus toxoid immunization program.

With the ever increasing need of personnel in health fields, many organizations are actively presenting the facts to the young people of the state through different channels. The education consultant attended the Annual Health Careers for North Carolina Congress in Winston-Salem and accompanied AMA's exhibit, "A Career in Medicine," to most of the six district congresses. Appropriate material was distributed to interested students.

The critical shortage of nurses in the state is one of the primary concerns of the Committee of Physicians on Nursing. To discuss this and other areas of nursing, the committee met three times this year. On several occasions, nurses were invited to these meetings. The consultant attended the Annual Meeting of the State Nurses' Association and the quarterly meetings of the North Carolina Committee on Nursing and Patient Care.

Much of the first nine months have been spent in getting acquainted with the people, programs, and policies of the Medical Society. Many thanks are due to the committee chairmen and members, many other doctors, the State Board of Health and other organizations, and the staff of the Society.

Other meetings and trips reported on to the Executive Director and committees were:

National

16th National Conference on Rural Health, Hot Springs, Arkansas.

17th National Conference on Rural Health, Columbus, Ohio.

American Nursing Home Annual Meeting, New York City.

AMA Headquarters Orientation, Chicago.

Medical Society Executives Association and Public Relations Institute, Chicago.

Ninth National Conference on Physicians and Schools, Chicago.

Annual Conference of the American Country Life Association, Raleigh.

International Rural Health Seminar, Duke.

State Organizations

N. C. Council on Food and Nutrition.
N. C. Conference for Social Service.
N. C. Adult Education Association.
N. C. State Red Cross Conference.
Family Planning Conference.
N. C. Health Council Annual Meeting.
N. C. Heart Association Annual Meeting.
N. C. Mental Health Council.

Medical Society

Joint Council for the Health Care of the Chronically Ill and Aging.
Rural Health Advisory Committee.
Executive Council.
Annual Committee Conclave.

Officers Conference.

Kay K. Zeigler
Education Consultant

THE AUXILIARY TO THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA ANNUAL REPORT OF THE PRESIDENT 1963-64

To tell the story of dedication and service of physicians' wives in North Carolina in each community in which their husbands practice medicine would take volumes. As President of the Auxiliary to the Medical Society of the State of North Carolina, I have had the happy privilege this year of getting to know physicians' wives better and of seeing them in action rendering services to others. In addition to being the doctors' helpmates, they have been their community envoys and representatives, for they have assumed leadership in health, education and community service projects, showing sincere interest in all aspects of public welfare in each city, town and village in our State.

Truly the Medical Society has wonderful partners for with the state theme of "Partnership" this year, your wives have told well the story of the physician and his wife through service. Reaching far into orbit in many fields of endeavor, they have "Served and Communicated" "Partnership" in medicine with you.

As you review the year's work of the Auxiliary, I hope that you will bear this thought in mind. We are **Your Auxiliary** and through all the services we render we are striving to enrich the dedicated services you, the physicians of the State of North Carolina, render. The Auxiliary through its program tries to guide and teach the individual member to be a wiser and more informed citizen concerning medicine and a better working member of the groups in which she serves her community.

While serving as President-Elect plans and preparations were made for this year of office as President. Officers and Committee Chairmen were appointed and representatives to other organizations secured. The master file was kept up-to-date, recording the offices held by each member in her county auxiliary. I attended many county meetings, the Fall Conference for Presidents and Presidents-Elect of the Woman's Auxiliary to the American Medical Association, and the Annual Meeting of the Auxiliary in Atlantic City.

In May 1963 I was installed as President of the Auxiliary to the Medical Society of the State of North Carolina at the annual convention held in Asheville. At the President-Elect's luncheon the theme of "When I was President" was successfully portrayed in a skit cast by my own Burke County Auxiliary and former Past Presidents of the Medical Auxiliary. It was our pleasure to have with us at this meeting Miss North Carolina, Miss Janice Barron, a physician's daughter of Morganton, North Carolina; Doctor John Robert Kernodle, President of the Medical Society; Dr. John S. Rhodes, President-Elect with whom I would serve; and Mrs. William Thuss, President of the Woman's Auxiliary to the American Medical Association. With this array of past, present and future presidential material and with the acceptance of the gavel at the annual meeting, I launched my year as President, knowing that I had the enthusiastic support of each county auxiliary president and the wholehearted support of the Medical Society.

During the summer months the working manual of the Auxiliary, "Guide Posts," was compiled and packets of informational material for County Presidents were assembled. This is the annual summer work executed by the President. This sixty-seven page manual, covering important information from twenty-nine state committee chairmen, councilors, state officers, messages from the President of the Medical Society and the Chairman of the Advisory Committee, National information from the Auxiliary to AMA, and a calendar of important dates, gives each County President the information she needs to know concerning the functions of the Auxiliary during her year in office. The President also designs the cover and the dedication page. This year "Guide Posts" was dedicated "To Physicians and Their Wives - who share as Partners a humanitarian role compounded of Dedication, Ability, Compassion, Understanding and Humility through Service."

The annual Fall Workshop plans were also completed during the summer. This conference was held in Salisbury on September 10 with the Rowan-Davie County Auxiliary as hostesses. At this workshop, to which county presidents, presidents-elect and committee chairmen are invited, the state chairmen of the Auxiliary introduced the Auxiliary program for the year. Wearing appropriately decorated hats, portraying the various committees they represented, they explained the Auxiliary plans and projects. This clever visual presentation inspired those present to return to their county auxiliaries and start action on many projects. It was our pleasure to have Doctor John Rhodes to speak to us. He emphasized how much the Medical Society was depending upon the Auxiliary for help in membership, sustained interest in the Medical Society and Auxiliary, legislation, and stimulating more interest and attendance at the state convention. Dr. Robert D. Croom, Jr., gave an inspirational message on "Medicine and Religion" using the text —"A cheerful heart doeth good." Mr. Wright Langley, Executive Director of Health Careers, spoke on the Health Careers program of North Carolina. The film "The Cry for Help," a suicidal prevention film, was shown at the conclusion of the meeting.

At the September meeting of the Council of the Medical Society, I outlined to the Council the Auxiliary program for this year. It was a great honor for the President's report to be published

in the November issue of the State Medical Journal.

In October I attended the Fall Conference of the Woman's Auxiliary to the American Medical Association in Chicago. Valuable information was brought back to county auxiliaries to further implement the Auxiliary program. As President, I was asked to have a part in a skit with the Presidents from New York State and Oklahoma. The skit on medical legislation depicted "Social Security Socialites of 1983," should we fail as auxiliary members to actively engage in an all out effort to combat the King-Anderson legislation.

In January I attended the conference of the County Medical Society Officers and Committeemen in Pinehurst. This year Mrs. Elizabeth Margulis, AMA Field Representative to Women's Organizations, spoke on "The Wife of a Physician and How She is a Member of the Auxiliary Can Help Him" With this message to the doctors and my messages to their wives, our membership to date, March 1, 1964, is 2400. Our goal is 2500 by convention time. While we have not yet reached our full potential, according to the membership of the Medical Society, of having every physician's wife a member of the Auxiliary, we are climbing each year towards this goal. To date 151 new members have been added.

I have attended eight District Meetings, 10 County Meetings, held three Executive Committee Meetings, attended the Alamance-Caswell Auxiliary Antique Show, and the Mecklenburg County Auxiliary Tea honoring the charter members of their Auxiliary. I represented the Auxiliary at the Public Affairs Conference of the N. C. Council of Women's Organizations in Raleigh where three representatives of foreign governments, Russia, France and Great Britain, were guest speakers. It was my pleasure to meet these representatives personally at an informal reception and to be the envoy they met representative of the physicians' wives in North Carolina. I also represented the Auxiliary at the Academy of General Practice in Durham at their annual meeting. I attended the meeting of Southern Medical in New Orleans, the Governor's Conference on Safety in Raleigh, the state meeting of the N. C. Nurses Association, the Conference for Medical Society Mental Health Committees, and the Health Careers Fair in Durham. Due to conflicts, representatives from the Auxiliary were sent to the N. C. Family Life Council meeting, the Workshop of the N. C. Council of Women's Organizations, and the N. C. Health Council.

From Murphy to Manteo I have covered our lovely State for the Auxiliary. As far west as Asheville and to coastal Elizabeth City, miles became few and days away memorable when with each enjoyable destination reached I found dedicated physicians' wives serving in their auxiliaries and communities so well.

Plans for the annual convention in Greensboro May 2 to 6 have long been underway. "Bee with Us" is our theme. Appropriate flyers have been distributed by the President to each Auxiliary visited throughout the State, giving the tentative schedule and urging attendance. Four meetings have been held with the convention committee in Greensboro, with Mrs. Francis X. Berry, Chairman, and Mrs. John F. Lynch, Co-Chairman. Sedgefield Inn and its facilities were secured early for the Auxiliary functions.

My sincere appreciation to all who have cooperated and supported me this year. To the Auxiliary officers who have attended all executive meetings and have been willing listeners and workers when called upon. To the councilors who have planned excellent district meetings and served their areas so well. To the State Chairmen who have shown enthusiasm for each committee, to the entire membership, all of whom have been cooperative, gracious and deserve gold medals for services rendered.

My special thanks to Dr. John S. Rhodes, President of the Medical Society, for his interest and encouragement to the Auxiliary this year. It has been a pleasure to serve with this sincere, dedicated physician. The Auxiliary thanks Dr. Roscoe McMillan, Dr. Tolbert Wilkinson and members of the Advisory Committee for their advice and interest in Auxiliary affairs. We are indebted and appreciate the service of the staff of the Medical Society Headquarters Office and especially Mr. Jim Barnes' and Mr. William Hilliard's kindness when called upon.

Gratefully the Auxiliary thanks the Medical Society for financial assistance. As our activities and services have increased, we have had to call on you for an increase financially. We appreciate the consideration given us this year.

And now if your impression of Auxiliary meetings has been one of "Fashionable doctors' wives meeting in a fashionable club or restaurant to discuss fashion," let me set the record straight. The glaring error in the last statement lies in that final word. Our smartly dressed Auxiliary members have met in the better restaurants, city clubs and their own homes, but they have substituted the topic "Creations of Christian Dior" with "Service to Others."

I present to you with Pride and Admiration the services of the Auxiliary to the Medical Society of the State of North Carolina for the year 1963-1964.

AMA-ERF—The education and research foundation to which 40 county auxiliaries have contributed $2,596.68 as of March 1, 1964. The largest contribution from a county was $584.95, Rowan-Davie.

AUXILIARY NEWS—The quarterly newsheet by which we communicate with all paid members. Printed by Hospital Saving Association of Chapel Hill, it is mailed out by the Headquarters Office of the Medical Society.

AWARDS—Given by nine past presidents of the Auxiliary. Two $100 awards are given. These awards

stimulate interest in the work and are awarded during the convention.

BULLETIN—The publication of the National Auxiliary and urged for every county officer to be a subscriber. One hundred thirty-four subscribers this year. Two counties were 100%, Johnston and Onslow. Halifax-Northampton County Auxiliary has an account of their radio program in the March issue.

BY-LAWS—Five changes are being voted on at convention this year pertaining to the Board of Directors, terms of councilors and committee chairmen.

CIVIL DEFENSE—Thirty-six auxiliaries reported that 200 members took courses in either home nursing, medical self-help or first-aid. Fifty members taught these courses. Fourteen auxiliaries reported that many of their members have prepared their homes for disaster and 21 members have received awards for home preparedness. Programs have been given to Boy Scouts, Girl Scouts, P.T.A.'s, Radio, distributing literature and working through Red Cross and through local Civil Defense Organizations.

COMMUNITY SERVICE—To list the community services rendered by Auxiliary members would be a Herculean task. Volunteer and philanthropic work in Health Drives was done by hundreds of physicians' wives, giving thousands of hours of service. Training courses were given, leadership workshops held, immunization programs carried out in every county. In addition the services of Auxiliary members on the community leadership status is outstanding, with membership on town and city boards, school boards, city, county, state and national board representation in many organizations. We are honored that Mrs. Robert Garrard is National Chairman of Mental Health for the Auxiliary A.M.A.

DOCTORS' DAY—Established by the Woman's Auxiliary, Southern Medical Association. Has been observed in many ways. Numerous plans are carried out by Auxiliaries to honor their doctors. It is gratifying this year to see that monetary contributions are being made to special projects in their honor.

HEALTH CAREERS—This has been one of the most enthusiastic committees of the year. Thirty counties have had active Health Careers programs and have cooperated with Health Careers of North Carolina. Clubs have been established in local schools, literature distributed, films shown and students transported to various Health Careers Congress Meetings. In addition, thirty-six auxiliaries have established scholarship and loan funds for nursing students. One auxiliary, Alamance-Caswell, through proceeds from an Antiques Fair provides the following: $400 scholarships at U. N. C. Chapel Hill, U. N. C. Greensboro, School of Medicine U. N. C., Western Carolina, and a $500 scholarship at Elon College. A list of all scholarships in many communities has been made and one of all auxiliary scholarships and loan programs is now available.

HISTORIAN—Gathers material from county auxiliaries each year to prepare a State History every five years.

LEGISLATION—Has been active in each county. The auxiliaries have been encouraged to write letters to their Representatives and Congressmen, to make personal contacts if possible and to assist the county Medical Societies with Operation Home Town. While we have not been called on as much as we anticipated, we have on our own sent hundreds of letters, many telegrams, made personal contacts and had many legislation programs. Nineteen auxiliaries reported special programs including speakers, the showing of the film "The Gift of Health" and the distribution of legislative information. Auxiliary members were encouraged to join AmPac-MedPac this year.

MEMBERSHIP—Letters and personal contacts were made this year to increase membership. March 1, 1964, membership is 2400 with 60 counties organized. Districts 2 and 5 report 100% organization. Six counties are 100%.

MEMORIALS—The chairman makes an effort to pay tribute to deceased members, comfort their families, both on the County and State level. Ten members have died during this year.

MENTAL HEALTH—Twenty-five auxiliaries had active Mental Health programs and thirty-seven have Mental Health Chairmen. Many wonderful projects were carried out in this program. There is a good deal of interest in the Mental Health Clinics being established in the communities and auxiliary members are becoming active volunteers. The Suicide Prevention Program was the main emphasis and the film "The Cry for Help" was shown in many counties. The Greensboro Branch of Guilford County Auxiliary conducted a pilot program which is written up in the May issue of "Today's Health."

MENTAL HEALTH RESEARCH ENDOWMENT FUND—Raised by voluntary contributions for Psychiatric, Research, and Treatment at Memorial Hospital, University of North Carolina. This is to be a $10,000 Endowment. Only three years old, the balance on hand as of February 10, 1964, is $5,-023.55. Thirty-seven counties contributed $829.00 this year.

PROGRAM, RADIO, T: V., MOVIES—Many auxiliaries had outstanding programs this year. Using good speakers, panel discussions, film, and the radio, much information and enthusiasm was stimulated on various programs and projects. One auxiliary had as its main project this year a weekly radio program. Moderated by a physician's wife, this program presented to the public once each week for thirty minutes material on medical subjects. Physicians were speakers for some, but most of the material was secured from medical journals,

the AMA Journal and medical pamphlets.

PRESS AND PUBLICITY—The reports showed that the pamphlet "So You're Publicity Chairman" had been studied. Also the excellent Publicity Handbook from the Woman's Auxiliary to AMA was sent to each county auxiliary. The avoidance of strictly social news was well noted, and the real meaning of Doctors' Day and its observance well stressed. Auxiliaries tried to report their good services in each field of endeavor.

RESEARCH—Twelve auxiliaries reported carrying on Research Projects by writing histories of county medical societies and biographies of individual physicians. Mecklenburg County Auxiliary assists in the library maintained by the County Medical Society with 35 members giving 60 hours each week to filing, cataloging, and clipping medical articles, assembling journals for binding and other duties.

RURAL HEALTH—Fourteen counties reported activities in Rural Health projects. Two auxiliaries had contacted Miss Kay Zeigler. Five had distributed health cards. Eight had given subscriptions to **Today's Health** to County 4-H winners and two had given the magazine to their county high school libraries. Two auxiliaries had participated in area rural health conferences. One helped with physical examinations in a county high school and one staffed the N. C. Medical Society Blood Typing Booth at the State Fair. One made dressings for the county cancer society and one distributed 1500 health pamphlets to Home Demonstration Clubs. Almost all auxiliaries are sponsoring with their Medical Societies a county-wide polio immunization program. Haywood County Auxiliary participated in the first one.

SAFETY—Gun Safety has been promoted this year with several gun clinics being held. The N. C. Rifle Association has been most cooperative. In addition, Hazards of Home Chemistry Sets, Senior Citizen Safety and Traffic Safety have been emphasized. Twelve auxiliaries have had active programs. Watauga County for 13 weeks had an article on some phase of Safety in the local newspaper.

SCRAPBOOKS—Kept by counties and duplicates of newspaper clippings, programs and momentoes are sent for the State Scrapbook as a means of preserving activities as a part of Auxiliary history. One hundred per cent representation of material from each county was received this year.

SANATORIA BEDS—

Cooper—Four guests have been helped during the year. A physician's mother-in-law, a graduate nurse, a laboratory technician and a nursing school student. Numerous gifts and $25.00 have been sent to these patients.

McCain—Three patients occupied this bed during the year. Two nurses and one needy patient. Gifts and money were sent to the patients with the Remembrance Schedule.

Stevens—This bed has had two patients during the year, a needy patient and the widow of a physician, Mrs. T. M. Bittinger. It is with deep regret that this wonderful member died, but we are glad that the Auxiliary could share in this way her illness with her. Gifts and money amounting to $150.00 were sent to the needy patient.

Yoder—Three patients have occupied this bed during the year, a male licensed practical nurse, one needy patient and a druggist. Gifts have been sent to these patients.

STUDENT LOAN FUND—Balance on hand February 10, 1964: $4,218.06. Twelve loans have been made. Thirty-one counties have contributed $1,073.00 this year. Outstanding loans as of February 10, 1964, $7,888.06.

WA/SAMA—The chapter presidents will be invited to attend our annual convention. An interest is shown in these future auxiliary members by the State Auxiliary and the chairman of this committee. Forsyth-Stokes has been very active with the SAMA group at Bowman Gray this year.

YEARBOOKS—Were encouraged to stimulate interest in Auxiliary programs, projects, and meetings. There were 21 counties reporting having yearbooks.

INTERNATIONAL HEALTH ACTIVITIES—A new committee of only two years has increased in interest and participation this year. Fourteen auxiliaries sent sample drug supplies, medical text books, bandages, old oral thermometers, surgical scissors and hospital gowns to the World Medical Relief, Inc. In addition, foreign doctors and students were entertained in homes, programs were given by physicians who had recently served in foreign countries and subscriptions to medical journals were sent by physicians and their wives to foreign doctors.

WOMAN'S AUXILIARY TO SOUTHERN MEDICAL ASSOCIATION—The councilor reported an increase in membership this year.

ADVISORY COMMITTEE TO MEDICAL SOCIETY AND RURAL HEALTH AND EDUCATION—The Auxiliary is honored to have a representative to this committee. They met March 15, in Raleigh, N. C., and our representative reported.

EYE BANK FOR RESTORING SIGHT, INC.—Is given publicity by the State Chairmen. A few counties had a program on this organization's work.

FLORENCE CRITTENDEN HOME—Has had publicity through the Auxiliary about its humanitarian project. Several auxiliaries have made financial contributions.

N. C. COUNCIL OF WOMEN'S ORGANIZATIONS—Is an organization of statewide Women's Organizations to which we have two representatives. It conducts a leadership workshop, sponsors the World Affairs Institute at the University of North Carolina, a Public Affairs Conference, and promotes continuing education after high school. They also keep a roster of women leaders in our State.

N. C. FAMILY LIFE COUNCIL — Affiliated with a National Council, interested in family minded organizations. Their members cooperate in study and service. We have a representative to this organization which met in Greensboro last October.

N. C. HEALTH COUNCIL—Composed of 60 affiliated organizations, serves the health interests of the State as a planning, study, and coordinating agency. Their publication "Health Careers for Tar Heels" was used by our county auxiliaries this year. Our representative attended their meetings.

N. C. LEAGUE FOR NURSING—Invites our representatives to their convention. This year's theme "Community Needs — League Action" was explored on several viewpoints.

And now I salute each auxiliary member who is responsible for the amazing amount of work accomplished this year. We have no central office to tabulate our work and I am sure that being our own secretaries, it has been impossible to list all the services each individual member has rendered. As emissaries of good will for our physician husbands and united as the Auxiliary to the Medical Society of the State of North Carolina, we have accomplished Herculean goals of Service to Others. We look forward to another year with increased membership and activity and even greater goals of service to you, the doctors, to the communities in which we live, and to a greater State and Nation for future generations to inherit.

Mrs. John C. Reece
President

FIRST MEDICAL DISTRICT

There has been only one incident in the District requiring close observation. This revolved around the attempt of a physician to begin practice in the area. The qualifications of the individual were questioned. With the help of the central office the matter was disposed of.

Our local symposia, post graduate courses, and Society meetings have been well received and another successful year can be anticipated.

T. P. Brinn, M.D., Councilor

SECOND MEDICAL DISTRICT

The 2nd Medical District of the North Carolina State Medical Society has had a good year. The annual District Meeting was held by the Lenoir-Jones-Greene Society as hosts, at the Kinston Country Club, on April 25th, 1963. Highlights of the meeting were an afternon of golf, social hour, and a delicious dinner, followed by a fine presentation on "Acute Psychiatric Emergencies," by Dr. Hans Lowenbach of the Duke University Psychiatric Staff.

At this meeting, the 2nd District reaffirmed, by majority vote, that the 2nd District continue a regular spring annual meeting as in the past, with the time and place set by the host society. The host for the next meeting will be the Craven-Pamlico Society. The date and place is as yet unannounced.

The 2nd District is now totally officialy organized, by the formation of the Craven-Pamlico Society, there having been no formal organization of physicians in Pamlico County prior to this year.

Your Councilor has found a fine spirit prevailing during a visit to each component society, and it is especially gratifying that the entire 2nd District is having a simultaneous mass Sabin polio drive, beginning March 22, 1964.

Lynwood E. Williams, M.D., Councilor

THIRD MEDICAL DISTRICT

The Third Medical District had a normal routine year for 1963. The Councilor was not called on to make any special investigation.

As Councilor I have attended all Executive Council meetings and as well as County Officers Work Shop.

Our District Society meetings have been well attended and instructive.

Dewey H. Bridger, M.D., Councilor

FOURTH MEDICAL DISTRICT

The reorganization of the Fourth District Medical Society accomplished in 1963 has continued to move forward during 1964. The Annual Fall Meeting held in Rocky Mount in 1963 was very well attended and an exceptionally fine program was presented. The 1964 Spring Meeting of the Fourth District is scheduled for Goldsboro on April 14, 1964, and at this meeting the three leading Democratic Gubernatorial Candidates will appear on the same platform. This is probably unique in Medical Society meetings in North Carolina. The handling of the District Society's business affairs by a lay consultant has contributed much to the reorganization and to the continuing success of the Fourth District Medical Society.

Apart from District Society activity, the Councilor reports an otherwise quiet year within the Fourth District. There has been one serious case of non-professional conduct which was handled by the local county society and by the State Board of Medical Examiners and later by the courts. One other particularly difficult professional situation involving a physician with a limited license has been resolved by the physician moving into another state. Otherwise, no serious professional difficulties have come to the attention of the Councilor and in general the Fourth District has enjoyed a progressive and harmonious year.

Edgar T. Beddingfield, Jr., M.D., Councilor

FIFTH MEDICAL DISTRICT

Our district meeting was held at Whispering Pines Country Club at Pinehurst, North Carolina. The meeting was a full day affair with golf in the morning and scientific and business session in the afternoon. The meeting was well attended

and a tasty banquet closed the day. We were fortunate to have as our guest several outstanding speakers from out-of-state and also our President John S. Rhodes and Bill Hilliard from the central office.

Our representation at the Officers Work Shop was excellent.

I have attended all State Council meetings and carried out instructions to the best of my ability.

Ralph B. Garrison, M.D., Councilor

SIXTH MEDICAL DISTRICT

The following is my report to you as Councilor of the 6th Medical District of the Medical Society of the State of North Carolina.

This is the first year that the 6th Medical District of the Medical Society of the State of North Carolina has not had an annual meeting as an organized unit. There has nevertheless been active and enthusiastic participation of the membership of the component county societies within the district during the past year. Meetings of the local county societies have been well attended, excellent programs have been provided, and enthusiasm has been manifested. Debate and friendly discussions have been carried on concerning the problems of National Legislation, as well as problems which affect the Medical Society within the State.

The Councilor of this district has attended meetings of most of the societies within the district. He has also attended each meeting of the Executive Council and the Annual Meeting of the Society. There have been several grievances of a minor nature which were settled to the complete satisfaction of all parties concerned.

It would appear that the 6th District on the whole, has enjoyed an excellent year.

George W. Paschal, Jr., M.D., Councilor

SEVENTH MEDICAL DISTRICT

The annual 7th Medical District meeting was discontinued for 1963 due to a lack of interest on the part of the physicians. The county presidents for the 10 societies were contacted by the councilor and a majority felt that our meetings were poorly attended and not worth the effort expended to put another one on at this time. The Stanly County Medical Society was to be the host for 1963, and if the 7th Medical District should put on further meetings I suppose the next one will be sponsored by the Stanly County Medical Society.

No serious problems have arisen in the district. The councilor has attended all of the executive council meetings of the Medical Society of the State of North Carolina and has visited in most of the counties in the district.

Edward S. Bivens, M.D., Councilor

EIGHTH MEDICAL DISTRICT

There are two problems that I can report on as apparently being completed which I have had occasion to investigate in the Eighth District. Both pertain to individual doctors who dispense their own drugs. Several complaints, all heresay, came from Wilkes County where it was reported that a Doctor's wife who acts as his office nurse was being allowed to dispense medicine in the doctor's office when the doctor was absent. It was also alleged that the doctor himself was being generous in the amount of barbiturates and amphetamines he was dispensing. The reports were given me by doctors in Wilkes County who had received them from various laymen in the area. On August 25th I visited this Wilkes county solo practicing physician at his office. I told him of the reports which had been received and that I was concerned and felt it my duty to inquire about the problem. He neither denied nor admitted the veracity of the reports. He stated, "You came up here to tell me that my house is not in order and that you want me to get it in order." My response to that statement was, "Doctor, I came to tell you that there have been a lot of reports coming to me to the effect that you should get your house in order." This visited physician indicated that he understood and agreed with my suggestions.

On Thursday, February 13th, I visited a solo practicing physician in Rockingham County, at the instance of the Chairman of our Legislative Committee who had received information to the effect that the physician was permitting his office nurse to dispense medication when he was absent. The physician was quite cordial and stated that perhaps he had allowed his nurses some liberties as a matter of accommodation to patients which they should not be granted. He indicated that he understood the legal hazard and would do his best to avoid violating the laws which pertain to the dispensing of medicines by anyone not licensed.

At the January term of criminal court in Rockingham County, Dr. Theodore Harris Millman of Leaksville, now resigned from the Society, was tried for his alleged responsibility in the death of a patient, who at four months pregnant was revealed by autopsy to have died of a ruptured uterus. The trial resulted in a hung jury and will be retried probably in June 1964. There is considerable feeling by physicians in this area that Dr. Millman has definite emotional problems which neither he nor his wife nor his attorneys will admit.

There is a matter now pending before the Rockingham County Medical Society which pertains to the censuring of four surgeons who practice in the county. The reason for this censure is reputedly based on an article which appeared in the public press. I have been promised a copy of this article but to date that has not been forthcoming.

It is my wish that I be allowed to complete this report at a later date. It is my information that the matter will be brought up before the Rock-

ingham County Medical Society at its next meeting March 19, 1964.

Harry L. Johnson, M.D., Councilor

NINTH MEDICAL DISTRICT

As the representing Councilor for the Ninth Medical District I am pleased to report no problems related to harmony nor malethics coming to attention during the year.

As Councilor of the Ninth Medical District, I attended the Fall Committee Conclave which was held in Mid Pines Club, Southern Pines, September 1964 and also the Executive Council meeting Sunday, September 29, 1964, following the Conclave of Committees.

I attended the January 26, 1964, Midwinter Executive Council Meeting.

T. Lynch Murphy, M.D., Councilor

TENTH MEDICAL DISTRICT

In general, Medicine is well observed and practiced in our District.

We have had some serious problems during the past year, but they have been settled and things are moving along more smoothly and we are now O.K.

W. A. Sams, M.D., Councilor

ADMINISTRATIVE COMMISSION

(See report of Committee on Finance.)

ADVISORY AND STUDY COMMISSION

Committee No. 1. Auxiliary Advisory and Archives with Medical Society History under the capable chairmanship of Dr. Roscoe McMillan, this committee has maintained the records and has been available to the Auxiliary as the need has arisen.

Committee No. 2. American Medical Education and Research Foundation, Dr. H. B. Underwood has served as Chairman of this committee for this year and promoted the work of the Medical Education Foundation and the donations to that organization have increased.

Committee No. 3. The committee on Blue Shield under the able chairmanship of Dr. W. Z. Bradford, this committee has represented the physicians of this state in an admirable fashion.

Committee No. 4. Constitution and By-laws under the chairmanship of Dr. Roscoe McMillan, this committee has modified and presented to the Executive Council and to the House of Delegates proposed and approved changes in the constitution and by-laws.

Committee No. 5. Industrial Commission of North Carolina, Dr. Ralph W. Coonrad and his committee have ably represented the Medical Society in this area.

Committee No. 6. Medical Care of Dependents of members of the armed forces, Dr. David Cogdell has maintained our representation for people involved in this area.

Committee No. 7. Student AMA Chapters, Dr. William P. J. Peete and his committee have had an excellent year and have brought the medical students into closer association with the Medical Society. This has been an outstanding achievement by this committee.

Committee No. 8. Blue Shield Deputation to National Blue Shield, Dr. T. S. Raiford and his committee have maintained our liaison in an admirable manner.

Committee No. 9. Relative Values Schedule, Dr. Bugg and his committee have made their report which is available.

Committee No. 10. Committee Advisory to Marriage Counseling, Dr. Rachel Davis has presented an admirable report from this committee.

For the details of these committees and the work of the commission the reader is referred to the individual chairman's report.

Hubert McN. Poteat, Jr., M.D.
Chairman

ANNUAL CONVENTION COMMISSION

(Report not received at press time.)

THE PROFESSIONAL SERVICE COMMISSION REPORT

George W. Paschal, Jr., M.D., Commissioner

I. Committee on Disaster Medical Care

At the time of the Conclave at Mid Pines, North Carolina, in late September 1963, this Committee met.

The Committee went on record as recommending to the Executive Council that the name of the Committee be changed from the Committee on Emergency Medical Service and Military Affairs, to The Committee on Disaster Medical Care. This was done in order that the Committee would conform with that of the American Medical Association and the Committees in most other States. This recommendation was later approved by the Executive Council, and consequently, the new name is in effect. (This Committee's detailed report is printed in full on page 27.)

II. Committee on Eye Care and Eye Bank:
Dr. L. B. Holt, Chairman

Over six hundred eyes, for eye tissue transplantation, have been handled by forty Ophthalmologists during the last thirteen years through the Statewide North Carolina Eye-Bank, Inc., set up, with headquarters in their own building at 2041 Queen Street, Winston-Salem, North Carolina 27103.

One hundred and eighty-eight physicians rendering eye care in North Carolina have received three separate mailings, questionnaires, etc., from the Committee. Educational programs about BB guns and other fire arms have been sponsored.

The Committee reaffirms the overwhelming vote of eye physicians in North Carolina for the additions to the Relative Value Fee Schedule by the House of Delegates as follows:

5435	Refraction without cycloplegia	3.0
5436	Refraction with cycloplegia	3.5
5448	Removal of foreign body under slit lamp	3.0
5415	Complete fitting of prosthesis	8.0
5460	Fitting of contact lens	25.0

Following the meeting of this Committee at the Conclave in Mid Pines in late September 1963, the Committee submitted a resolution that "A medical Ophthalmologists (medical doctor) should be appointed to all Boards of Disability and/or Retirement for all eye cases. The Board of Trustees of the American Medical Association should advise the Adjutant General and all others havings Boards of Disability and/or Retirement about this resolution."

This resolution was presented because it was felt that the current practice of having non-doctors pass upon this problem was not in the best interests of the disabled veteran or the public. This, incidentally, is the first resolution to be proposed to the Trustees of the American Medical Association by the Medical Society of the State of North Carolina for several years. This matter has been referred to the appropriate Committee and is under study by the AMA.

III. Committee on Insurance:

Dr. Joseph W. Hooper, Jr., Chairman

The Insurance Committee of the Medical Society of the State of North Carolina has met on several occasions during the past year to review the progress of the program sponsored by the State Medical Society. The three programs sponsored by your Society are the Business Expense Policy, the Compresensive Hospitalization Policy, and the Professional Liability Policy.

The Business Overhead Expense Policy and the Catastrophic Hospitalization Policy have had an unusually large number of claims in the past year, and in order to insure soundness of this program, greater participation is needed. This has been discussed and reviewed with the Administrator of this program, Mr. Ralph Golden, of Greensboro.

The Professional Liability Program underwritten by the St. Paul Companies, has enjoyed greater participation during the past year, although as elsewhere in the country, the number of possible claims are increasing. This program is on a sound basis, at this time, and your committee would urge greater participation in order to further strengthen the program.

In line with the reclassification by the National Bureau, as to classes of physicians, your Committee, with the approval of the Executive Council, approved this new classification of physicians, for our State program. This results in a decreased premium for some, but an increased premium for others, but the over-all premium to the company is not significantly increased. Your Committee will review this program periodically during the coming year, and if and when premium reductions are practical, we will certainly do everything possible to obtain these for the membership.

IV. Committee on Necrology

Dr. Chas. F. Pugh, Chairman

This Committee continues to perform its usual duties of listing with the State Headquarters all physicians who had died during the past year. Deaths for 1963 and 1964 have been published in the Roster with solemn designation.

This Committee feels that it would be well for a system to be developed whereby each county would report to the Executive Director deaths occurring within the geographical boundaries of the Society. This should be done promptly and kept up-to-date with adequate biographical material. It is anticipated that this information would be turned over to the Editor of the Journal for his use.

Additional information will be given at the time of the Annual Meeting in Greensboro.

V. Physicians Committee on Nursing:

Dr. Fred C. Hubbard, Chairman

This Committee has had several meetings during the year which have been well attended. At the meeting in Mid Pines in September 1963, guests included a representative of the NCSNA who gave a report on the "Objectives and Needs of Nursing in North Carolina," which was flavored with National policy. An excellent report of the inception of the Health Careers Program in North Carolina was given by one of its coordinators. Both of these reports afforded information helpful in the deliberations of the Committee. Miss Kay Zeigler reported on the North Carolina Committee on Nursing and Patient Care.

The Committee is vitally concerned about improving nursing education in North Carolina at all levels. Toward this end a meeting of the Committee exploring ways and means by which this might be accomplished was held in High Point in January of this year.

A subsequent meeting was held in Burlington in February, at which time representatives of the North Carolina State Nurses Association, The League of Nurses, the North Carolina Hospital Association, and The Board of Higher Education of the State of North Carolina were in attendance. Much progress was made and the problem will be pursued following a study currently being instituted by the Board of Higher Education in conjunction with other State agencies. This Committee has established firm liaison with these groups and the prospect is bright that something worthwhile can be realized toward the improvement of Nurses Education at all levels in North Carolina.

VI. Committee on Postgraduate Medical Study

Dr. Marvin N. Lymberis, Chairman

At the time of the Conclave at Mid Pines, North Carolina, in late September 1963, this Committee met.

At this meeting the Committee unanimously agreed to offer its services to any and all of the Medical Societies in helping them secure programs, out of town speakers, and in any way possible to

further postgraduate medical study. There have been several requests for programs which have been easily filled by this Committee.

It was felt that the many seminars and extention courses now being offered by the three Medical Schools of this State adequately covered that field as well as the numerous activities of the American Academy of General Practice.

It was further suggested by this Committee that consideration be given to having the North Carolina Specialty Sections meet with the Sectional Meetings of the Medical Society at its Annual Sessions rather than having two separate meetings. Since many postgraduate courses are being overlapped, this would prevent some of this occurring.

VII. **Committee on Health Careers**

Dr. Fred H. Taylor, Chairman

The Committee on Health Careers met at Mid Pines on September 28, 1963. The meeting was well attended. An interesting and informative discussion took place. The Committee made the following recommendations:

1. Recommend active physician participation on the local and State level in conjunction with Career Days at High Schools.

2. Recommend continued Medical Society cooperation with Health Careers for North Carolina.

3. Recommend the Executive Director, Mr. Barnes, write a letter to County Medical Society Secretaries requesting a local liaison person to be designated to contact the Health Careers District Office in their areas.

4. Recommend that appropriate material from the Raleigh office be sent to the person named to act as liaison.

5. Recommend that the Committee on Health Careers be dissolved or be incorporated in another Committee or as a Subcommittee of another Committee.

PUBLIC RELATIONS COMMISSION

Acute awareness of the importance of this Commission by the medical profession at large and the excellent work done by the various committee chairmen and members makes possible this fine report. It affects and should be of interest to every member of the Medical Society.

1. Committee on Hospital and Professional Relations.

Dr. T. H. Mees and his committee had several important problems to confront them this year.

(a) Difficulties experienced by one of our members with a break in relations between himself, his hospital staff and his hospital board.

(b) Alleged over utilization of health insurance in a particular area of the state.

Investigations were carried out and recommendations will be presented at the Annual Meeting.

2. Committee on Legislation.

This committee continues to be a most active one under Chairman Dr. Ed T. Beddingfield, Jr. Major emphasis during the year has been given to:

(a) Implementation of the North Carolina Kerr-Mills Act. Several meetings were held with the Department of Public Welfare officials in an effort to help with this matter.

Recognition by a letter of appreciation was given the Governor, legislators, physicians and others who have helped with getting this bill passed.

(b) Reviewed and discussed passage of Mental Health Bill.

(c) Reviewed passage of Sterilization Bill and recommended that details of the new law be disseminated to all physicians and hospitals. This was carried out.

(d) New Vital Statistics Law reviewed.

(e) Operation Hometown Program reviewed and all county medical societies assisted in effecting their organized programs.

(f) Organized a committee of six which attended the Third Annual Public Affairs Conference of the United States Chamber of Commerce held at Washington, D. C. in February.

(g) Active in standards regulating nursing homes and boarding homes, highway safety and revision of Medical Practice Act.

3. Commttee on Medical - Legal. Dr. Julius Howell, Chairman.

This committee reviewed the background and development of the Medical - Legal Code of North Carolina. Encouraged county joint Medical - Legal meetings. Chairman attended the National Medico-Legal Symposium in Miami Beach, Fla.

Plans are underway to hold a joint meeting with the comparable committee of the North Carolina Bar Association.

4. Committee on Public Relations.

Chairman, Dr. Philip Naumoff, and his Committee, contributed greatly to the work of the Society this year.

(a) A blood typing service in cooperation with the North Carolina Society of Medical Technologists will be a part of our exhibit at the North Carolina State Fair again this year.

(b) Gift subscriptions of **Today's Health** will be renewed for the Governor, members of the General Assembly, Council of State and Supreme and Superior Court Judges.

(c) Recommended Medical Press "get together" at county level.

(d) Continue to support high school Science Fairs and will invite a high school State Science Fair exhibitor from the Biological Division to present his or her exhibit at the annual North Carolina Medical Society Meeting.

(e) Planned and helped set up the program for the Jan. 25, 1964, Conference of Medical Society Officers held at Pinehurst.

(f) "Orientation Information Booklet for Physicians" was approved and printed for distribution to physicians who have joined the Society during

the past two years. Also to be given to new members as they joined the Society.

5. Committee on Rural Health. Dr. Edward Boyette, Chairman.

(a) Stressed continued, on State and County level, enthusiastic cooperation with the 4-H Clubs in all matters related to health.

(b) Close liaison with major agricultural organizations urged.

(c) Urged all North Carolina physicians to take a more active part in activities at local level which will portray the physician as a citizen as well as a doctor.

(d) Urged continued emphasis be given Tetanus Toxoid Immunization Program.

(e) Urged more active interest in tuberculosis be taken by county societies and health departments, particularly in conjunction with the School Health Committee.

(f) Urged cooperation with Health Careers, Inc., toward the end of procuring needed medical personnel throughout the state.

6. Committee on Insurance Industry Liaison. Dr. Frank Jones, Chairman.

(a) This committee held four meetings during the year at which time many individual cases were reviewed, discussed, and action taken where claims had been questioned or refused to be honored.

(b) The "so-called" cancer policies written by some companies were considered and questions raised as to their worth.

(c) The frequently used terms "usual, customary and reasonable fees" were discussed and definitions agreed upon.

(d) The Claim Review Service Booklet was approved and copies were mailed to the entire membership.

This committee has been a busy one and a most productive one this year.

7. Committee Liaison to North Carolina Pharmacy Association. Dr. James Hendrix, Chairman.

(a) Furthered plans for a joint meeting of the committees representing the two professions.

(b) Reviewed the Kerr-Mills Act enacted and special study given to the drug provisions in regards to what drugs and to whom they may be provided.

(c) Reviewed workings of the National Kidney Disease Foundation and services rendered.

8. Committee Advisory to the North Carolina Highway Patrol on Traffic Safety. Dr. Simmons Patrick, Chairman.

Acutely aware of the ever rising highway traffic death toll, this committee, with invaluable assistance from Major Charles Speed and Mr. Elton Peele and other interested state officials, worked diligently toward formulating plans for enlisting the aid of the medical profession in:

(a) Obtaining medical evaluation for persons with known physical or emotional conditions which would possibly render them unsafe on the highway.

(b) A program was formulated and will be submitted for approval at the Annual Meeting.

9. Committee on Association of Professions. Dr. John R. Kernodle, Chairman.

The North Carolina Association of Professions was officially organized in January 1963. Charter membership was made up of four state professional groups.

1. Medical Society of the State of North Carolina.
2. Professional Engineers of North Carolina.
3. The American Institute of Architects.
4. The North Carolina Veterinary Medical Association.

Since then the North Carolina Pharmacists have joined. Four quarterly meetings were held.

The major purpose of the Association of Professions is to provide a "forum" and organizational machinery whereby the combined strength and council of all professionals can be utilized for the advancement of professional ideas and the promotion of professional leadership.

Dr. John R. Kernodle is the newly elected president of the organization. This organization has great potentialities and our active participation should be encouraged.

10. Committee Advisory to the AAMA.

A two member Advisory Committee has worked with the Association of Medical Assistants during the year whenever there was need for this service.

H. Fleming Fuller, M.D.
Commissioner

PUBLIC SERVICE COMMISSION

It was my privilege during the past year to attend meetings of each of the twelve committees in this commission. The Chairman of each committee was present at the Pinehurst meeting. There was spirited participation in discussion by the members at each committee meeting. The committee work in the past year has been active and a credit to the Medical Society of North Carolina. You are referred to the individual reports of the committees for the specific outline of their activities during the past year. Your Chairman attended meetings of the AMA in Atlantic City and the Public Affairs Conference in Washington.

Thomas G. Thurston, M.D.
Chairman

COMMITTEE ADVISORY TO THE AUXILIARY AND ARCHIVES OF MEDICAL SOCIETY HISTORY

ADVISORY TO THE AUXILIARY

Each year the Women of the Auxiliary prove again that H. L. Mencken was right when he called women "The supreme realists of the race." A few of the Auxiliary's realistic accomplishments the past year include the new project;

Religion and Medicine

We are seeing a renewed and vigorous interest by people as a whole, especially the medical profession and clergy, in the interrelationship of Medicine and Religion in treating the whole patient.

Other important accomplishments include, Co-operation with the National Theme "Serve and Communicate" with especial emphasis on service and partnership in:

Community Service
W.A.S.A.M.A.
Safety
Programs
International Health Activities
Health Careers
Mental Health
Civil Defense
Sanatoria Beds
Legislation
Rural Health
Funds AMEF-ERF
Research
Doctor Day

These women are dedicated to the profession of their husbands to being helpful and useful in affairs that concern the medical profession. They are a wonderful force.

Archives of Medical Society History

We are progressing satisfactory. This is a long range project, so much research and some of our Subcommittee Chairmen have been sick throughout the year. However, when completed and put in bound volumes I hope will be a valuable asset for the Society.

Roscoe D. McMillan, M.D.
Chairman

COMMITTEE ON AMERICAN MEDICAL EDUCATION AND RESEARCH FOUNDATION

This committee met on Friday, February 27, 1963, and outlined the program for the coming year. The following work has been accomplished by the committee:

1. Each county society secretary was asked to appoint one person to handle the AMA-ERF.

2. A letter was sent to the Presidents of the State Auxiliary asking them to again support the AMA-ERF program and to offer any aid which they would need.

3. Letters were written to the deans of the medical schools in North Carolina enclosing printed material to be used in the school publications.

4. An editorial was furnished to the North Carolina State Medical Journal for publication.

5. An annual letter to the members with a return AMERF envelope will be sent during the Spring.

6. The total now given to the Foundation during 1963 was $3,333.61 contributed by 93 members of the North Carolina Medical Society. It was noted that if each physician only gave $5.00 per year that the total contributions would be increased five-fold, and it is the hope of the Committee that the total number of physicians will participate and the program in 1964 will be greatly increased.

Harry B. Underwood, M.D.
Chairman

COMMITTEE ON ANESTHESIA STUDY COMMISSION

The Committee on Anesthesia Study Commission has issued 461 questionnaires since the last quarter of 1961. Returns are quite incomplete for 1963 but the over-all response since September 1961 is significant.

There have been, during this period, 49 deaths which were considered preventable from the standpoint of anesthesia. Three of these represent anesthetic deaths reported by the Committee on Maternal Welfare for 1963, since liaison has been established with that group.

Better than 50% of this group of cases were thought, by the submitting physician, to represent non-preventable deaths as far as anesthesia was concerned. Instances of frank overdosage, errors in choice of agent or techniques, and inadequate pre-operative preparation were not the exception in this group of patients.

There are many instructive cases in this series and, in order that an end-product evolve from this study, they will be utilized for their educational value.

Cases have been disguised and rendered anonymous. They are then to be commented on by a surgeon and an anesthesiologist, and submitted to the N. C. Medical Journal as a monthly case report.

Luther C. Hollandsworth, M.D.
Chairman

COMMITTEE ON ARRANGEMENTS

The Committee on Arrangements met Thursday, September 27th, at 8:00 P.M., at the Mid Pines Club, Southern Pines, North Carolina. Present were Chalmers Carr, M.D., John C. Burwell, M.D., J. Lenoard Goldner, M.D., Chairman, Annual Convention Commission; John S. Rhodes, M.D., President; James T. Barnes, Executive Director; Charles W. Styron, M.D., Chairman.

Dr. Chalmers Carr gave complete details on the Charlotte facilities for the 1965 meeting, and gave a report on the Charlotte local committee on arrangements which had met on September 12, 1963. This committee is composed of Drs. Carr, Van Hoy, Lymberis, Harloe, and T. S. Raiford, President-Elect. It was the opinion of this local committee that the Merchandise Mart would be rented and used for meetings, including the General Sessions, House of Delegates, and Section meetings. It will be necessary to arrange for an acoustical system for the meeting area in order to block out noise from various meeting areas. There are physical disadvantages for a meeting of this type at the

Merchandise Mart but it was felt that the committee would be able to overcome these deficiencies. Ample parking is available at the Merchandise Mart and catering service for meals will be available.

The following facilities were recommended for alumni groups and special luncheon meetings:

Hotel Barringer
Queen Charlotte
Manger Motor Inn
Stork Restaurant
Barclay
Nixon Brothers
Roman House

These facilities are in reasonable driving distance of the meeting area.

The Park Center was the choice of the local committee for the banquet and ball. The banquet will be catered.

Final arrangements for the 1965 annual meeting will be concluded by the Executive Director as the need arises.

The Committee on Arrangements discussed the Greensboro meeting for 1964 which is well planned with most details complete. Dr. John Burwell is to contact the press and TV for necessary coverage for the 1964 meeting. The Executive Director is to proceed with final arrangements for the use of the facilities of the Plantation Club for the banquet and ball.

The Committee on Arrangements gave approval to inviting allied groups to register and attend meetings. Admission is to be by badge only for all persons.

The Guilford County Medical Society members will be charged with the responsibility of taking care of special guests. There will be a hospitality room at the Headquarters Hotel. It was the opinion of the committee that provisions for a hospitality room be made at the Coliseum for guests. A lounge area will be made available in the lobby of the Coliseum.

Parking is quite adequate at the Coliseum, and it was felt that commuter buses would not be needed. The committee decided furthermore that it would not be necessary to furnish transportation for medical students from the various medical schools for the Greensboro meeting.

Projection equipment and requirements are to be managed by Mr. Woody Hunt, medical student. with six projection helpers.

Charles W. Styron, M.D.
Chairman

COMMITTEE ON SCIENTIFIC AUDIO-VISUAL POSTGRADUATE INSTRUCTION

A meeting of the Committee on Scientific Audio-Visual Postgraduate Instruction was held on Friday, September 27, 1963, at the Mid-Pines Club, Southern Pines, N. C., for the purpose of developing the program for the Annual Society Meeting in Greensboro, N. C., in May, 1964. It was decided to have the audio-visual program on Monday and Tuesday. The Postgraduate and Audio-Visual Program is presented in the Program of the One Hundred Tenth Annual Session of the Medical Society of the State of North Carolina.

J. C. Grier, Jr., M.D.
Chairman

COMMITTEE ON SCIENTIFIC WORKS

The Committee on Scientific Works has responsibility for the preparation of the scientific program for the Annual Meeting, with specific responsibility for arranging the program for the General Sessions. One formal meeting was held on September 26, 1963, at Mid Pines, North Carolina. Much thought and discussion was given to preparing a program of maximum interest to the majority of physicians, and the themes were arrived at as described below.

For the First General Session, a Symposium on Hypertension was planned, with participation by an Internist, a Surgeon, a Psychiatrist, and moderated by an Obstetrician. The Second General Session was planned to devote half the morning to Periodic Health Examinations and Immunizations. Also included was an address on the Organization of the Emergency Room in General Hospitals and the AMA's Program on Mental Health. This was followed by a CPC.

The Third General Session included reports of the State Board of Health and various committees. The speakers for the Third General Session were arranged for by President Rhodes.

Paul F. Maness, M.D.
Chairman

COMMITTEE ON BLUE SHIELD

By appointment of recent Presidents of the Medical Society of the State of North Carolina, the Blue Shield Committee was composed of the following members:

W. Z. Bradford, M.D., Chairman (1964)
Roy S. Bigham, Jr., M.D. (1966)
Willard C. Goley, M.D. (1965)
Frederick C. Hubbard, M.D. (1964)
William A. Hoggard, M.D. (1966)
George W. Holmes, M.D. (1966)
Max P. Rogers, M.D. (1965)
Jacob H. Shuford, M.D. (1965)
Walter T. Tice, M.D. (1964)

At its first meeting in 1963 (February 17), the Committee again met with numerous medical consultants, legal consultants, and officials of the Plans to study possibilities of upgrading and modernizing the $4,200 income limit program. At this and subsequent meetings it became apparent that meeting the minimum demands of specialty organizations would result in an increased premium rate for the coverage, which would require a public hearing and approval by the Insurance Commissioner. Therefore

at its second meeting in April, the Committee voted to retain the $4,200 program without conseqential changes and to designate it as the Low Option Plan and to propose to the House of Delegates the adoption of a separate and addition High Option Program providing benefits for income levels of $4,000 individual and $6,000 family.

It should be pointed out, however, that clarifications and improvements were made in the regulations governing the Low Option Program, i.e., a provision providing 50 per cent payment for concurrent unrelated procedures was continued, but the provision that limited the sum of these to not more than the amount of the major procedure was eliminated; the provision providing reduction to 75 per cent allowances for joint concurrent medical-surgical unrelated care was removed so that each would get 100 per cent. It was determined after survey of all Blue Shield Plans that benefits for surgical assistants contained many administrative difficulties and created new problems; therefore, it was stipulated that the charge for surgical assistants was the responsibility of the subscriber and not the surgeon; it was affirmed that contract provisions and the cost base limited benefits to services provided by M.D.'s and that the request of the Dental Oral Surgical group to receive benefits under existing surgical endorsements could not be acceded to without affecting charges to the public.

IMPLEMENTATION OF THE NEW HIGH OPTION PROGRAM—After serious study of the feasibility of the numerous specialty meetings that would be required and the possibility of using existing local and national schedules, the Committee determined to base the new High Option Program upon the Professional Service Index of National Blue Shield. This is a composite relative value schedule derived by actuarial averaging of the latest and most up-to-date Blue Shield Schedule in each state. The committee proposed adoption of this schedule at conversion factors of $4.17 for Surgery (this yields a top fee of $405 and a $150 fee for lapartomy); $2.00 for Medical Service (this provides $15 first day, $10 second and $5 thereafter, with additional benefits for consultation examinations, detention with a critically ill patient, and intensive care benefits for care of critically ill patient); $5.00 for Radiology and Pathology, which yields allowances commensurate with customary charges.

The adoption of the High Option Program as a separate and additional program was approved by the House of Delegates at its May, 1963, meeting in Asheville, and implemented through the Committee and the Plans with an effective date of November 1, 1963. The initial announcement was made to all members of the Society in a letter signed jointly by the President and this Committee's Chairman.

In addition to these major developments, the Committee at each meeting considered and acted upon requests for establishment of allowances for new procedures and reviewed and adjudicated individual claims for professional services when requested by either of the Associations or by a physician.

The Committee was saddened by the sudden illness of its Chairman, Dr. Jake Shuford, in the spring of '63, but pleased that his recovery has progressed to where he is again active in his profession and as a member of the Committee.

The Chairman, on behalf of the Committee, acknowledges the cooperation and help of the Society's President, Dr. John S. Rhodes, and the Executive Director, Mr. James T. Barnes, Mr. K. G. Beeston, the Committee Secretary, and the Officers and Trustees of both Hospital Saving and Hospital Care Associations.

W. Z. Bradford, M.D.
Chairman

COMMITTEE ADVISORY TO N. C. BOARD OF PUBLIC WELFARE

This committee, as such, has met but once this year; this being an organizational meeting held at Southern Pines, September 26, 1963. At this time the committee was joined in its discussions by Dr. Thomas G. Thurston, Commissioner, and Dr. E. T. Beddingfield, Chairman, Committee on Legislation.

Dr. Beddingfield apprised the committee on the then current status of implementation of Kerr-Mills legislation by the North Carolina Department of Public Welfare. It was agreed that Dr. Beddingfield, currently, was serving as proper liaison between the MSSNC and the Department of Public Welfare. He was to notify Commissioner Brown of the Department of Public Welfare that the committee was quite interested in Kerr-Mills implementation and other matters of common interest and would be at his service on reasonable notice.

The committee submitted to Commissioner Brown, through Dr. Beddingfield, a list of suggested North Carolina physicians who might be available to serve on the staff of the Welfare Department in an administrative capacity in the implementation of Kerr-Mills legislation in North Carolina.

Attention was given to the various county review programs of medical re-evaluation of welfare patients. Thought was given to the voluntary expansion of this program. Suggestions were considered for further updating the effectiveness and extending the usefulness of this project. It is reasonable to say that this program is expanding into several additional counties this spring of 1964. Still other counties are becoming interested in the possibilities of such a re-evaluation program.

The Chairman of this committee has, on several occasions, been asked to participate in meetings and conferences with other groups to discuss matters pertaining to the relationship between physicians in North Carolina and the North Carolina State Board of Public Welfare. These matters were more

pertinent to other Commissions and Committees, and these sessions are recounted in other annual reports.

There is still need of this committee and there will be much to be done once the present political and economic impasse related to Kerr-Mills implementation has been rectified.

Amos N. Johnson, M.D.
Chairman

COMMITTEE ON CANCER

The Committee on Cancer held its annual meeting September 27, 1963, at Mid-Pines, North Carolina. Recommendations made made to the Executive Council to increase the appropriation of the State Board of Health Cancer Control Program by $150,000.00 per year to provide funds for a full twelve months period. At present the funds are exhausted in the first eight months of operation. A recommendation that the Cancer Clinics should do sigmoidoscopies as part of the routine physical examination. A recommendation that chest x-rays should be made on welfare recipients at the local county health departments.

Recommendations to the State Board of Health which have been included in their program have been to include cobalt treatments for payment under the State Board of Health Cancer Control Program and to increase the number of x-ray treatments for cancer patients from twenty to thirty in any one year.

In cooperation with Dr. D. F. Milam the State Board of Health surgical fee schedule for the State Cancer Program was revised and increased.

Our committee has worked in close cooperation with the North Carolina Cancer Institute, Lumberton, North Carolina, and the hospital census at the institute has been the highest in the past year that it has ever been. Patients have been admitted from all sections of the state.

The committee and its members have been active in the American Cancer Society program in the local county units and also at the state division level. There has been excellent cooperation between our committee and the North Carolina Division of the American Cancer Society.

The Chairman was the guest speaker at the Governor's Commission to Study the Cause and Control of Cancer in North Carolina in Raleigh February 23, 1964.

D. E. Ward, Jr., M.D.
Chairman

COMMITTEE ON CHILD HEALTH AND POLIOMYELITIS

The principal activity of this committee this year has been the implementation of Mass Oral Poliomyelitis vaccine programs. At meetings in Durham in July 1963 and Mid Pines in September 1963 after exhaustive discussions and explorations into the matter, it was decided this committee would recommend to the Executive Council that a mass simultaneous oral vaccine program sponsored by the State Society, as previously contemplated, would not be feasible. Instead it was recommended that the individual county societies sponsor their own programs. This policy was adopted by the Executive Council. Subsequently the committee has acted in an advisory capacity in regard to choice of vaccines, dates, publicity, etc., to the component county societies in their campaigns. More than sixty societies have implemented or have plans to implement mass oral polio programs before summer. To date the success of these campaigns and the enthusiasm and response to them have been gratifying.

Richard S. Kelly, Jr., M.D.
Chairman

COMMITTEE ON CHRONIC ILLNESS INCLUDING TUBERCULOSIS AND HEART DISEASE

During the past year, the State Committee on Chronic Illness has continued its diverse activities within the program of the State Medical Society. It is appreciative of the cooperative support and helpful direction extended by the past and present Officers of the State Society, the Executive Council, its Commissioner, and the Executive Director.

While the committee has continued its indirect and direct communication and coordination of activities with interrelated committees, especially the Legislative Committee, there has been a planned shift in basic emphasis to that of professional interests and needs in areas of chronic illness in all age groups. Additional appointments of members and consultants to the committee have been carefully considered so that nearly all geographical and political areas of North Carolina are represented. It is believed that this will facilitate the orderly transmission of information and direction from the state level to the component county medical society; will improve liaison and consultation between the County Chairman on Chronic Illness and the State Committee on Chronic Illness; and should open another avenue of expressing the needs and interests of the County Medical Society to the State Committee level.

The Committee is now composed of seventeen members and eight consultants. For special interest and working purpose, the committee is subdivided into seven subcommittees as follows:

1. Heart Disease including Vascular and Renal Disease
   Ralph H. Morgan, M.D., Chairman
2. Respiratory Diseases including Tuberculosis and Allergy
   John L. Shirey, M.D., Chairman
3. Cancer
   W. C. A. Sternbergh, M.D., Chairman
4. Youth and Adult Education
   Hugh A. Matthews, M.D., Chairman

5. Nursing and Boarding Homes
   D. A. McLaurin, M.D., Chairman
6. Accident Prevention
   Donald D. Weir, M.D., Chairman
7. Home Care Programs
   Thomas R. Nichols, M.D., Chairman

Additional subcommittees will be added as indicated.

In addition to two formal full committee meetings held in September 1963 and January 1964, the Chronic Illness Committee has been represented by its membership, either through attendance or through participation at more than thirty meetings; eight on the national level, fourteen on the state level, and more than twelve on the local level. The Joint Advisory Council for the Health Care of the Chronically Ill and Aging, the Advisory Council to the Committee on Chronic Illness met in Raleigh, November 17, 1963.

The following basic interests and activities of the committee for the past year may roughly be divided as follows:

1. The committee has been active in increasing contacts with other agencies (of voluntary, private and governmental origin), and interested in improved standards for the chronically ill and aged through the mechanism of the "three C's" (communication, cooperation and coordination). Information varying from continued research to that of practical application of proven methods has been received from time to time by the committee, and on request the committee has communicated to various professional groups and agencies data, plans and special interests.

2. The committee has encouraged its individual members and the chairmen of Chronic Illness Committees of the County Medical Societies to broaden their contacts with the Individual Boards of County Commissioners, particularly in matters pertaining to health and especially in broadening services under Kerr-Mills Legislation. It is felt that approaches made in cooperation with the comparable chairman of the Legislative Committee resulted in favorable expression and political action by certain of these boards.

3. There has been continued liaison with the Nursing Home Advisory Council to the State Board of Health, through our subcommittee. Our continued informal contacts with various other divisions of the North Carolina Board of Health are considered to be wholesome, cooperative and productive.

4. Continued communication with local, county, state, and national organizations has been adequately maintained through the attendance of more than thirty official meetings as reported above. There is little doubt that the constant gathering of information at national levels, passing through the state level to the local county organizations, is a profitable and rewarding undertaking. It is interesting to note that "Guides for Medical Society Committees on Aging" released in January 1964 through the AMA Council on Medical Services (as prepared by the National Chronic Illness Committee) are extensive in scope and include such zones as purposes, membership, format, activities and various programs of an educational nature. This committee is already similarly organized and is well along many of the paths so clearly outlined.

5. The committee continues to place its major emphasis on fostering physician interest in the Home Care Program, its initiation, support, direction, and control. The joint committee's production of the "Guide to the Establishment of a Home Care Program" is being unusually well received throughout the state and is being requested by other state and national groups. Several mechanisms are being used to promote and encourage the distribution and use of this publication to interested professional as well as lay groups. There are now thirty-seven counties in the state with some type of home care service plan in operation and five units have such plan under consideration. There are thirty-one active home care programs in the state of which thirty are financed in part by the health departments and State Board of Health. It is increasingly evident that personal presentation or individual contact is by far the best method of interesting local areas in this and other similar programs.

6. The National Council for the Accreditation of Nursing Homes, a joint venture of the AMA and the ANHA, is well established and active nationally. Special attention has been directed to this committee. The accreditation program in North Carolina had met with very little response, due primarily to a lack of an active program and to inadequate communication. The medical profession, through the AMA, controls the program, directs it and furnishes the major portion of the funds. At the committee meeting, January 24, 1964, it was pointed out that the revised Rules and Regulations for the Licensing of Nursing Homes in North Carolina are in general equal to or more stringent than the required standards for the Accreditation Program. It was felt that accreditation of the nursing home would enhance its position in receiving references of patients from the practicing physician, would provide a favorable factor in obtaining increased payment by welfare funds to defray actual cost of services, and would immediately place the home in a position to receive allocated insurance funds and payments. With these points in mind, the committee recommends to the Executive Council "the council's endorsement and full support of the accreditation program and the national council for the accreditation of the nursing homes; and further recommends endorsement of full and complete implementation of the program as soon as practicable." The reasoning of the committee has been transmitted to all committee members and they are asked in turn to contact all

nursing homes eligible for accreditation in their district and to recommend their immediate application for accreditation. This committee has been asked to present and to clarify some of these points before the annual meeting of the North Carolina Nursing Homes, Incorporated, in Charlotte, North Carolina, on March 11, 1964. The interest of the State Medical Society membership and full cooperation will be offered.

In addition to the six basic interests, the committee has increased its communication with the AMA through its Committee on Aging and other related divisions. The heightened AMA interest in State affairs and operations is demonstrated through an increase in interesting, instructive brochures, personal communications and contacts. This is most welcome and gratefully received. The year also bore evidence of increased interest and representation by the National Society at National Meetings pertaining to chronic illness of the aging.

In February 1964, a "Shop Talk" film strip was taped on the subject of Home Care Programs. The arrangement for this production and its extensive implementation was made by Dr. D. A. McLaurin, a member of this committee. It is being accomplished in conjunction with the American Academy of General Practice. This strip of an informative, provocative nature is being made to be shown primarily to County Medical Societies as another method of creating interest and presenting information pertaining to Home Care Programs. It is hoped that it can also be made available for the use of interested lay groups.

At its meeting, January 24, 1964, the committee on Chronic Illness made two recommendations to the executive council; the first pertaining to the endorsement of the Accreditation Program of Nursing Homes is quoted above. The second recommendation was that the Chronic Illness Committee indicate to Dr. Robert A. Gregg of the Department of Physical Medicine and Rehabilitation, Duke Hospital, its interest in and its support of the department's study of Continuation Medical Care in the Durham, Vance, and Franklin County Areas. The committee further recommended that the council urge the cooperation of individual physicians in these counties.

Individual members of the committee on chronic illness have continued to participate in many state and local programs and activities which are not documented here.

Planned Continuing Projects for the Year

1. Constant effort to exchange information with physicians at the local level.
2. To increase physician interest in Home Care Programs and promote the use of the "Guide to the Establishment of a Home Care Program."
3. To continue individual contacts with the county commissioners in matters pertaining to health, with special reference to the implementation of services under Kerr-Mills Legislation.
4. To continue opposition to any national health legislation of "Forand" or King-Anderson type.
5. To maintain a cooperating relationship with professional groups and agencies interested in the improvement of standards and services for the chronically ill and aged.
6. Maintenance of a cooperative relationship with the Joint Council to Improve the Health Care of the Aged and the AMA in matters pertaining to health and chronic illness in any age group; and to foster increased exchanges through more frequent meetings.
7. To expedite the program of the National Council for the Accreditation of Nursing Homes.
8. To initiate interest and action in the various subcommittees of the Committee on Chronic Illness.

The above outline continues to center about the theme of Communication, Cooperation, and Coordination, which should apply equally well to the future needs of this committee.

Thomas R. Nichols, M.D.
Chairman

COMMITTEE ON CONSTITUTION AND BY-LAWS

(Makes report to House of Delegates at First Meeting on Sunday, May 3, 1964.)

COMMITTEE ON CREDENTIALS OF DELEGATES TO HOUSE OF DELEGATES

The Committee on Credentials functions mainly at entrance of Meeting of the House of Delegates First Annual Meeting in certifying Delegates' credentials to be seated in the House of Delegates. A continuous coordination of the Committee in functioning with deliberating officers in the House of Delegates to assure correct and democratic processes is the aim of this Committee.

Charles B. Wilkerson, Jr., M.D.
Chairman

COMMITTEE ON DISASTER MEDICAL CARE

At the time of the Conclave at Mid Pines, North Carolina, in late September 1963, this Committee met.

The Committee went on record as recommending to the Executive Council that the name of the Committee be changed from the Committee on Emergency Medical Service and Military Affairs, to The Committee on Disaster Medical Care. This was done in order that the Committee would conform with that of the American Medical Association and the Committees in most other States. This recommendation was later approved by the Executive Council, and consequently, the new name is in effect.

It was also recommended that insofar as possible there be a carry-over of Chairmanship or personnel to function on this Committee.

The Committee discussed the problem of two

State-wide functions which had to do with the activity of this Committee and the membership of the Society. Previous consultation had been carried out with officials of the North Carolina State Board of Health, and the North Carolina Civil Defense Agency regarding these matters. The Executive Council of the State Medical Society upon the recommendation of this Committee adopted and established as policy, that the following State-wide functions would be carried out by the North Carolina State Board of Health:

1. The preposition and the disposition of Civil Defense emergency hospital units cacheed in the various 14 Civil Defense districts of North Carolina will be under the direction of the North Carolina State Board of Health and, of course, the local Civil Defense Director wherein these civil defense emergency hospitals are located. The use of these hospitals, in the event of an emergency, are still subject to the orders of Dr. George W. Paschal, Jr., as Chief of the Medical Service and Deputy to the State Director of Civil Defense. In the case of activation of the State-wide disaster Medical Care Program as envisioned in the written plan of Civil Defense in and for North Carolina.

2. The North Carolina State Board of Health will have the primary responsibility for the conduct of the public educational program to effect the individual's capacity for survival in event of an enemy atomic attack, particularly with reference to education in the use of fallout protective facilities equipment, substances and supplies. This educational program will be further organized and conducted by the North Carolina State Board of Health and in that respect you may anticipate communications from time to time of an informative nature emanating from the North Carolina State Board of Health.

Insofar as the medical profession has the capacity and can do so, the State Medical Society urges interest and cooperation in the educational programs for survival in the event of an enemy or atomic attack.

Arrangements are being made for the procurement of 12 additional Civil Defense Emergency Hospitals in North Carolina. The study is now being carried on as to a possible change in attitude of the location and utilization of these hospitals. The Medical Self Help Program in North Carolina is being received with moderate enthusiasm and under the new arrangement whereby the State Board of Health is responsible for the program. there is evidence of expanded participation.

This Committee was represented at the 14th Annual County Medical Society Conference on Disaster Medical Care held in Chicago, Illinois, on November 2nd and 3rd, 1963. The Chairman of this Committee spoke on the Role and Responsibility of the Individual Physician and the Medical Society at the Annual Conference on Disaster Medical Care at Atlantic City, New Jersey, preceding the meeting of the American Medical Association.

The Committee urges individual physicians and the component Medical Societies to keep informed regarding the problem of Disaster Medical Care, and to take the necessary steps within their own communities to accomplish Disaster Medical Care Planning at a local level which might be integrated into plans for the entire State.

In July 1963, the Chairman of this Committee made representations to the members of the Special Subcommittee of Congress concerning the Uniform Services Pay Act of 1963 with the particular recommendation that the Bill under consideration be amended to increase the Doctor Incentive Military Pay to $300.00 per month after six years of active military service and to $400.00 per month after ten years of active military service as a Medical Officer. An increase in the Doctor Incentive Pay from present maximum of $250.00 per month to the recommended maximum of $400.00 per month after ten years of service would certainly go a long way toward eliminating the existing doctor pay inequities between the Veterans Administration and the Department of Defense. The committee gave favorable consideration to this proposal.

George W. Paschal, Jr., M.D.
Chairman

COMMITTEE ON SCIENTIFIC EXHIBITS

The Committee began its work early in the summer of 1963 immediately after the AMA meeting, with attempts to procure as many of the award winning exhibits as possible. Of this group, ten to fifteen exhibits have been obtained for our Greensboro meeting. The first official committee meeting was held at the Committee Conclave at Mid Pines on September 27th, where plans for the year were formulated.

Subsequently, scientific exhibits were monitored at the American College of Surgeons, Southern Medical Association and regional AMA Meeting in Portland.

More than 500 linear feet of exhibits will be shown in Greensboro this year, and it is felt that the content of the exhibits is far superior to our showing of last year.

Max P. Rogers, M.D.
Chairman

COMMITTEE ON EYE CARE AND EYE-BANK

Over six hundred eyes, for eye tissue transplantation, have been handled by forty opthalmologists during the last thirteen years through the state wide North Carolina Eye-Bank, Inc., set up, with headquarters in their own building at 2041 Queen Street, Winston-Salem, N. C., 27103.

One hundred and eighty-eight physicians rendering eye care in North Carolina have received three separate mailings, questionnaires, etc., from the

Committee. Educational programs about BB guns and other fire arms have been sponsored.

The Committee reaffirms the overwhelming vote of eye physicians in North Carolina for the additions to the Relative Value Fee Schedule by the House of Delegates as follows:

5435	Refraction without cycloplegia	3.0
5436	Refraction with cycloplegia	3.5
5448	Removal of foreign body under slit lamp	3.0
5415	Complete fitting of prosthesis	8.0
5460	Fitting of contact lens	25.0

L. B. Holt, M.D.
Chairman

COMMITTEE ON FINANCE

The Finance Committee with all members present has prepared the budget for the calender year ending December 31, 1964, presented it to the Executive Council, and it is now in force.

We study an operating statement of the Society's income and expenditures submitted by the Executive Director each month. These reports keep us aware of the financial status of the Society at all times. It should be remembered that the administration, in any given year, is in power from May to May, while the budget is in force from January 1 to December 31. Therefore, the outgoing administrator is responsible for one-third and the incoming administration for two-thirds of that year's income and expenditures.

The budget ending December 31, 1963, showed a deficit of $7,430.23. (The 1962 deficit was $6,-456.10.) Two incidents are outstanding in this deficit. First: We counted some chickens before they were hatched. At the time the budget was prepared, we had reason to believe we'd have an unexpected revenue of $14,900.00 because of certain activities we were contempating. However, when the chickens hatched we had only $500.96. Second: The Journal expenses totaled $61,350.00. Its income; advertising, national $30,256; local, $8,630, and sales of the Journal, Roster, etc., $1,684, or a total of $40,570, made the Journal cost us $20,780. This was more expense and less income than had been expected.

Budgets and audits being somewhat flexible allow me to point out that our total actual deficit for 1963 could have been shown as $900.00 (instead of $7,430) if the $6,529.00 in dividends from investments had been shown as income. And then under expenditures shown it as capital investment. This, of course, was not done. Thus it stands at $7,-430.00.

A little good news is now in order. As of February 28, 1964, we own 11,545 shares of Investors Mutual Fund worth $11.94 per share or a ready cash value of $137,853.00 (1961 value $108,093.00) or enough to keep the Society going for six months with no dues and no income. And don't forget the land we still own on the Raleigh-Durham freeway that's increasing in value every year and carries very little tax expense.

All things considered we do not recommend an increase in dues for this coming year (1965).

Wayne J. Benton, M.D.
Chairman

COMMITTEE ON GRIEVANCES

No matters have come before the Committee on Grievances requiring a meeting of the committee as a whole.

There are a few cases that are being handled with preliminary correspondence. The Secretary and the Chairman have been in touch with each other continuously and have been together on one or two occasions. Unless unforeseen circumstances develop, I do not believe it will be necessary to have a meeting of the Committee as a whole before the State Meeting in Greensboro in May.

Lenox D. Baker, M.D.
Chairman

COMMITTEE ON THE MEDICAL GOLF TOURNAMENT

The Committee on Medical Golf Tournament met in the Sunroom, Mid Pines Club, Southern Pines, N. C., at 9:00 A.M., Saturday, September 28, 1963.

The following were present: William W. Forrest, M.D., Chairman, Kenneth B. Geddie, M.D., J. Leonard Goldner, M.D., Chairman Annual Convention Commission, and Mrs. LaRue King, Secretary.

The days of the golf tournament will be Monday, May 4th, and Tuesday, May 5th, at the Sedgefield Golf Course, using the Calloway System.

Headquarters Office will arrange for the prizes and will have them on hand to be given out at the beginning of the drawing of prizes on Wednesday, May 6th.

Dr. Forrest has made arrangements for the tournament with the administrator of Sedgefield Country Club, Mr. R. E. Fogarty.

William W. Forrest, M.D.
Chairman

COMMITTEE ON HOSPITAL AND PROFESSIONAL RELATIONS

(Report not received at press time.)

COMMITTEE TO WORK WITH THE NORTH CAROLINA INDUSTRIAL COMMISSION

This Committee met periodically during the year with the Commissioners and Medical Director and had fewer problems presented to it than during any of recent years. Dr. John Morris, as the new Medical Director, has utilized the full Committee in helping to formulate policy, and specialists in each field to evaluate all unusual fee problems. With the careful evaluation by representative members from each of the specialty groups in the Medical Society, a new and more detailed schedule of medical fees was adopted by the Industrial Commission and has been available in print since January 1, 1964. It is hoped that this will make

the work of both the physician and the Commission easier in evaluating fairly the fees being requested for approval.

A paper entitled, "Workmen's Compensation in North Carolina, its Philosophy and Application," was prepared by Dr. John Morris and published in the North Carolina State Medical Journal. Reading of this paper is recommended to each member of the Society.

Ralph W. Coonrad, M.D.
Chairman

COMMITTEE ON INSURANCE

The Insurance Committee of the Medical Society of the State of North Carolina has met on several occasions during the past year to review the progress of the program sponsored by the State Medical Society. The three programs sponsored by your Society are the Business Expense Policy, the Comprehensive Hospitalization Policy, and the Professional Liability Policy.

The Business Overhead Expense Policy and the Catastrophic Hospitalization Policy have had an unusually large number of claims in the past year, and in order to insure soundness of this program, greater participation is needed. This has been discussed and reviewed with the administrator of this program, Mr. Ralph Golden, of Greensboro.

The Professional Liability Program underwritten by the St. Paul Companies, has enjoyed greater participation during the past year, although as elsewhere in the country, the number of possible claims are increasing. This program is on a sound basis, at this time, and your committee would urge greater participation in order to further strengthen the program.

In line with the reclassification by the National Bureau, as to classes of physicians, your committee, with the approval of the Executive Council, approved this new classification of physicians, for our state program. This results in a decreased premium for some, but an increased premium for others, but the overall premium to the company is not significantly increased. Your committee will review this program, periodically during the coming year, and if and when premium reductions are practical, we will certainly do everything possible to obtain these for the membership.

Joseph W. Hooper, Jr., M.D.
Chairman

COMMITTEE ON LEGISLATION

The Committee on Legislation has had a busy, active, interesting, and generally speaking, a successful year. Committee members have made literally dozens of presentations before Legislative Committees, other public agencies, civic groups, allied professional groups, local medical societies, and so forth, and a number of press releases and television interviews have emanated from the Committee.

I. State Legislation:

In some degree the Committee and the Executive Director have given attention to all of the 2,101 Bills introduced into the 1963 General Assembly. Detailed study was carried out on 135 bills by the President of the Society, the Chairman of the Legislative Committee, and copies were sent to the Society Counselor and in instances to other Committee Chairman where there was a clear implication in the proposals for the interest of such committees. Many consultations were held between the staff, the Legislative Committee, Society Officers and Legal Advisors relative to the degree of action and decisions based on the importance of the various measures. Moreover, amendments arising out of Legislative action of the General Assembly and as many Committees were studied and their effects consulted about with the Legislative Chairman and Counselor and advice disseminated when regarded as propitious. Some suggested amendments were developed by the Legislative Committee and Staff relative to many of the Bills of interest to the profession and for the good of the public health and such amendments proposed to suitable Legislative sponsorers of these Bills. A remarkable amount of communication was carried on through memoranda exchange, telephone and correspondence.

(A) *Kerr-Mills Medical Aid to the Aged*:

The 1963 General Assembly enacted SB 8 in a revised, somewhat compromised form. However, this Act does provide the necessary enabling State Legislation for this State to proceed to develop an MAA Plan encompassing any degree of the scope of benefits allowable under the Federal Kerr-Mills Act, depending upon the desires, availability of funds, and appropriations made by succeeding Legislators. A companion appropriations bill (SB 423) was also enacted providing a total of seven hundred fifty thousand dollars in State Funds for the 1963-64 biennium with the funds being designated not only for the MAA Group, providing them with Drug, Diagnostic Out-Patient and Dental benefits as well as hospitalization (previously available), but also directing that similar benefits be provided for the recipients of Old Age Assistance, "No money payment" OAA; and also a program of drug and out-patient diagnostic benefits for the following groups: Aid to the permanently and totally disabled (category and "no-money payment") and aid to families of dependent children (category and "no-money payment"). Thus, even when matched with federal funds the monies available will be spread over a larger base than we had anticipated, and in addition there is some question as to the legal interpretation of the Legislation which at first glance seemed to give the Board of Welfare the option of spending all the funds by expanding existing welfare health care programs or to create the new MAA category. The Welfare Board elected the first described course of action above but the Attorney General of the State has issued an opinion

(questioned by the board and the opinion reaffirmed) that the State Act does indeed *direct* the Board to establish a new, separate MAA Plan. The Committee is doing everything possible to follow these rapidly evolving matters and to expedite the implementation in North Carolina.

(B) *Mental Health*:

At the time of the 1963 Annual Session, the Mental Health reorganization (SB 182) was pending before the General Assembly, and certain features of this proposed Legislation were objectionable to some of our members. A reference committee of the House of Delegates studied the Bill, and presented a report detailing some 17 suggested amendments. This report was adopted by the House of Delegates and the Committee on Legislation conveyed the thinking of the Society to the General Assembly, where 14 of the 17 amendments were incorporated into the finally-adopted version. It is the opinion of the Committee that this Legislation is a milestone in the conquest of mental illness in North Carolina.

(C) *Sterilization Bill*:

This statute, now entitled Chapter 600, Public Laws of 1963, clarifies the legality of voluntary sterilization in this State and declares such operations to be lawful under the conditions described in the Act.

(D) *Commercial Health Insurance for the Elderly*:

SB 462 authorized the establishment and regulations for a combined and joint action by commercial insurers and insuring persons 65 years and over and their spouses against financial loss resulting from accident and sickness. This measure was sponsored by the Insurance Industry in North Carolina with the endorsement and support of the Medical Society. It is the sense of the medical profession that it will cooperate in the extension of insurance resources in North Carolina under this private enterprise system and that increasingly the aged people of the State will take advantage of such a program.

(E) *Laws for Student Nurses*:

SB 271 provided a system of student loan for those entering the nursing profession and this would seem to enhance more adequate nursing personnel recruitment to augment the care of patients in the State.

(F) *Home Nusing*:

SB 420 authorized boards of health to collect fees for field service of para-medical personnels serving the near needy and the low income private patients who could benefit from services provided by health departments within their home and family units should enhance the extent of ancillary medical care to the aged in the home and the community. This is a marked departure and public services and sponsored by the Medical Society during consideration in the General Assembly.

(G) *Operation of Welfare Health Programs Through Insurance Plans*:

SB 493 was enacted as permissive Legislative authority to the State Board of Public Welfare to contract for vendor payments for hospital and medical services through insurance plans operated in and for the State. This is a progressive piece of Legislation which may ultimately bring to bear the underwriting of service plans of benefit for public assistant medical care under the various insurance plans available in an approved operation in the State. Ultimately, this will accrue as an accessible method of financing medical and related care to the aged population in the State.

(H) *Welfare Payments for Hospitalization*:

HB 218 was enacted authorizing reimbursement to general acute care hospitals of $20.00 per day for care for all public assistance cases including the aged—those receiving money payments as well as those eligible for hospitalization without money payments. This operates through the pooled fund which has been in effect in North Carolina since the early 50's and in 1961 was designed to cover MAA types of cases.

The pooled fund has been augmented from time to time up to the present level of $20.00 per day.

(I) *Others*:

There were many other Legislative enactments having a general or indirect effect on medicine and health care but these were of lesser importance and details will not be given here.

II. National Legislation:

The effort previously developed to increase communications with the North Carolina Congressional Delegation from physicians in each Congressional District was again emphasized in the past Society year. In July approximately 35 physicians representing all areas of the State journeyed to Washington for a day of legislating by AMA Officials, visits to individual Congressmen in their offices, and climaxed by a three-hour luncheon meeting with the entire Congressional Delegation. Again, both the lawmakers and the physicians seemed to feel that this was a worthwhile session and your committee continues to believe that this event should for the next several years at least be made an annual affair. In addition, in 1963 the Chairman of the Legislative Committee, the Society President and the Executive Director attended the Annual Public Affairs Conference of the United States Chamber of Commerce which is held in Washington each winter shortly after the reconvening of Congress. We were favorably impressed with the information imparted at the 1963 meeting that the request was made to the Executive Council to authorize certain additional scholarships so that more physician participation from this state might be enlisted. Consequently at the 1964 Public Affairs Conference, approximately 12 representatives from North Carolina were on hand and a very productive meeting was enjoyed. Each of our Congressional

Delegation was visited and in general it is felt that our Delegation continues to be opposed to compulsory health insurance financed under Social Security. At the time of the writing of this report, the King-Anderson (Health Insurance Act of 1964) remains with the Ways and Means Committee of the House of Representatives. Hearings on this measure have been completed. The Committee is expected to take some action on the measure in the very near future and it is the belief that an unfavorable vote to the Bill will be recorded. It is considered likely that any report, the Ways and Means Committee may offer some amendments to the Kerr-Mills Act which would further diminish the need for King-Anderson type of legislation. As a State Medical Society, our organized effort in the area of national legislation continues to operate within the framework of "Operation Hometown." Many of the county medical societies have a very well organized and well-operating structure under "Operation Hometown," whereas in many other counties only a skeleton organization is in existence. It is again urged that a functioning, well informed, active hometown operation be operational and active in every county within the State.

In addition to our major interests which have been focused on the King-Anderson Bill, other areas of national legislation pertaining to medicine and health affairs have also been followed closely. Copies of Federal legislation under consideration by the Congress which seem to be of interest to our profession are monitored by the Executive Director who then disseminates these as deemed appropriate to the members of the Legislative Committee and officers of the Society and whenever appropriate expressions of policy are transmitted to the North Carolina Congressional Delegation where we have experienced warm reception to our proposals.

The Committee Chairman acknowledges certain criticisms of the Committee's activity relating to a possible lack of communications between the Committee and the Society membership on certain items of legislation. An effort will be made to improve communications in this area in the future, although it must be realized that certain of these developments are so rapidly evolving and demands quick decisions that often times consultation with a large group is not practical. However, wherever practical, additional consultation and communication will be employed.

The Committee wishes to acknowledge the efforts of all who have made the hundreds of speeches, written thousands of letters, and expended untold energy in support of our national and state legislative goals. We are especially indebted to Jim Barnes, John Anderson, Bill Hilliard, Dick Nelson, and Ken Beeston for effort beyond the call of duty.

Edgar T. Beddingfield, Jr., M.D.
Chairman

REPORT OF DIVISION OF NATIONAL LEGISLATION OF THE COMMITTEE ON LEGISLATION

Representatives of the Legislative Committee on a National level have been to Washington twice for personal contact with the North Carolina Delegation in Congress. This was done in July and in February. Both of these trips were thought most rewarding and gave our representatives a feeling of great security in the North Carolina Representatives. Operation "Hometown" has been implemented over several months and is ready throughout the state to be called on, on short notice, for action against the King-Anderson Legislation.

Donald B. Koonce, M.D.
Chairman

COMMITTEE ON DOCUMENTARY PRESENTATION (COMMITTEE ON LEGISLATION)

The Division of Documentary Presentation has represented the State Society in the person of Dr. Edgar Beddingfield the chairman of the Committee on Legislation, to the General Assembly of North Carolina in advising and counseling on various matters having to do with health. Dr. Beddingfield also presented the statement to the Ways and Means Committee of the House of Representatives in behalf of the Medical Society of the State of North Carolina.

Hubert McN. Poteat, Jr., M.D.
Chairman

COMMITTEE ON MATERNAL HEALTH

The important work of the Committee on Maternal Health has proceeded smoothly throughout 1963. The analysis of Maternal deaths continues to be the most important task of the committee and at this time the committee enjoys the cooperation of most of the Practitioners in North Carolina. It is with regret that we announce the resignation of Mrs. Olive P. Hinman on December 31, 1963, who had served as secretary to this committee for sixteen years. She has been replaced however with a very competent and conscientious secretary in the person of Mrs. Helen Russell.

A total of 124 Maternal deaths were recorded during 1963. Of these 78 were nonwhite, 43 were white and 3 were Indians. Thirty-two of this number of deaths were caused by nonobstetric conditions. Toxemia with 22 deaths ascribed to this cause led the list, followed closely by 17 deaths due to hemorrhage, 15 due to infection, and 16 due to embolism. There were 7 cardiac deaths and 3 anesthetic deaths with 12 deaths due to other obstetrical conditions. There seems to be a continued slight increase of deaths due to infection most commonly associated with abortion. The statistics furnished by the Public Health statistics service for total live births in North Carolina are not available for 1963. However in 1962 the total live births were 109,549,

which is the lowest birth rate in North Carolina since 1950. A white birth rate of 75,166 was the lowest rate since 1952 and the nonwhite birth rate of 34,383 was the lowest since 1948. Of considerable interest is the fact that during 1962, 92.9 per cent of all live births occurred in hospitals. Ninety nine and five tenths per cent of all white births and 78.5 per cent nonwhite births being in the hospital. While 2.4 per cent of the total live births were home deliveries by M. D.'s. Of these 0.4 per cent were white and 6.8 per cent were nonwhite. Four and seven tenths per cent of the deliveries were by midwives. Of this number 1.4 per cent were white and 14.7 per cent were nonwhite. Thus it would appear that 5,148 deliveries were attended by personnel other than physicians in North Carolina during 1962. The 1962 birth rate of 23.5 per thousand population follows the continuous trend downward since 1946. In 1962 the illegitimate birth rate of 9.7 per thousand population however indicated a rise. Perinatal mortality rates continue to show a decline as 37.2 per 1000 deliveries were reported for 1962. Maternal mortality rate for 1962 was 4.7 per 10,000 live births which is variable from year to year but in general shows a downward trend. The Maternal white mortality rate was 1.7 per 10,000 live births the nonwhite was 11.1 per 10,000 live births, the former is a decrease and the latter is an increase in the rates.

The full committee has met twice during 1963, the first being in Winston-Salem, North Carolina. At this time the Maternal Health Committee hospital survey report was discussed and plans were made for communications with the various disciplines involved in the report. As the result of this meeting in February a meeting of a subcommittee from the maternal welfare group was held with the Director of the Red Cross Blood Procurement Service along with her professional advisory board to discuss the inadequacies pointed out in blood procurement and distribution by Red Cross and other blood distributing agencies. This was a very fruitful meeting and pointed out several methods by which improvement could be accomplished.

At the September Conclave of Committees of the Medical Society we met at Mid Pines with Commissioner Thomas Thurston. At this time plans were made for continuation of the study on therapeutic abortion in North Carolina. In October the Chairman of the Committee on Maternal Health was an invited participant in a program of the Committee on Maternal and Child Health of the American Medical Association at White Sulphur Springs, West Virginia. North Carolina Maternal Welfare members Drs. Frank Lock, James Donnelly, and William Spencer were also present. This was an interesting workshop on organization and operation of maternal welfare study groups.

It is the wish of the Chairman and Members of the Committee on Maternal Health to give as much help to the members of the State Medical Society as possible in obstetrical matters. It appears that there is room for continued improvement in the practice of obstetrics in North Carolina. Wherever our services are required we will make every effort to respond to any request.

W. Joseph May, M.D.
Chairman

MEDICAL-LEGAL COMMITTEE

I. **Review of work done to date:**

The Medical-Legal Committee met in Mid Pines on September 27, 1963, five members being present.

Review of the year's work was made, including report on the National Medico-Legal Symposium in Miami Beach in March. A plan was implemented for members of the committee to be available for talks on medico-legal subjects to county societies in their respective areas of the state.

A joint meeting of the Medico-Legal Committees of the N. C. Bar Association and the Medical Societies is to be held in May.

The Committee met on March 13, 1964, in Raleigh, five members and Dr. Rhodes attending.

Medico-legal meetings were held in some twenty-five counties. Some of these were joint meetings with the local Bar.

II. **Unethical actions:**

No incidents of alleged unethical conduct on the part of physicians have been reported to the committee.

III. **New fields:**

A standardized form for physicians' medical reports has been prepared. This is already in use in Forsyth County, and the Medico-Legal Committee for the N. C. Bar Association is interested in adopting such as their approved and recommended form. This will be considered at the next joint meeting of the two committees.

IV. **Recommendations:**

Formation of teams, made up of both physicians and attorneys, to be available to present medico-legal programs to either Medical Societies or Bar Association, or combined groups.

Julius A. Howell, M.D.
Chairman

COMMITTEE ON MEDICARE

The Medicare Program operated on a remarkably stable basis throughout the year 1963, as evidenced by the comparison of the number of physicians' claims and amounts paid during the years 1962 and 1963, respectively. The benefits provisions of the Program remained unchanged with only minor adjustments being made in the contracted Schedule of Allowances.

The Annual Report for 1963 from our Fiscal Administrator, Hospital Saving Association, is attached, which gives comparative statistics for the past two years. The report also indicates that over the past seven years, a total of $13,749,802.00 has

been paid to North Carolina physicians and hospitals under the Medicare Program — a significant factor in support of community hospitals and free choice of private physician.

The new Medicare Manual for Physicians issued by the Office of the Surgeon General, was distributed to North Carolina physicians participating in the Program during the year 1963. We believe this Manual will be of valuable assistance to physicians and their office personnel in understanding the provisions of the Program and the preparation of Medicare claims.

In August, 1963, the Office for Dependents' Medical Care, Office of the Surgeon General, U. S. Army, moved headquarters from Washington, D. C. to Denver, Colorado. Relationship with the Office for Dependents' Medical Care continues to be very satisfactory under the new director, Major General Howard W. Doan.

The Committee has called meetings as needed and consulted with subcommittee members as necessary. A number of special report cases and unusual or complex cases were adjudicated by the Committee at these meetings and my mail throughout the year.

Hospital Saving Association has continued to give excellent administration and cooperation. The counsel and aid of Mr. James T. Barnes and his staff at the headquarters office of the Medical Society have been invaluable.

The Committee recommends to the House of Delegates that the Society continue to contract with the government in the operation of the Medicare Program with specific direction to the Executive Council to continue, revise, or discontinue the Program as they see fit according to future developments.

D. M. Cogdell, M.D.
Chairman

Annual Report - 1963

To the Medicare Committee of the
Medical Society of the State of North Carolina
From
Hospital Saving Association
Chapel Hill, North Carolina

Hospital Saving Association has completed its seventh year as Fiscal Agent for the Medical Society of the State of North Carolina under a Contract to reimburse physicians for civilian medical care provided the wives and children of active duty servicemen. During the period 1957 through 1963, 89,310 claims were paid to North Carolina physicians in the amount of $7,337,601. Comparative statistics for the years 1962 and 1963 are as follows:

	1962	1963
Number of Claims Paid	12,231	12,603
Amount Paid	$1,006,778.85	$1,022,564.34

Hospital Saving Association personnel held a series of meetings during 1963 with doctors' secretaries and insurance personnel in several areas of the State for discussion of various Blue Cross and Blue Shield Programs, including the Medicare Program. These workshops have been beneficial to physicians' office personnel in understanding the programs and in preparation of claims.

The Office of the Surgeon General provided up-to-date Medicare Manuals which were distributed by mail to all North Carolina physicians participating in the Medicare Program and were also used in the group meetings with office personnel. The new manuals are concise but give all pertinent facts relating to the Program and can be of much assistance to physicians' offices in understanding the benefits of the Program and preparation of claim forms.

Under a separate Contract, the Association reimburses hospitals for care provided military dependents eligible to receive benefits. During the period 1957 through 1963, 65,787 claims were paid to North Carolina hospitals in the amount of $6,-412,201.

We take this opportunity to express our sincere appreciation and gratitude to the Medicare Committee, its Chairman, its Subcommittees, and Mr. James T. Barnes, Executive Director of the Medical Society of the State of North Carolina, for the cooperation and assistance in the administration of the Medicare Program.

Date: Feb. 10, 1964.

K. G. Beeston,
Director
Professional and Government Relations
E. B. Crawford
Executive Vice President

COMMITTEE ON MENTAL HEALTH AND MEDICINE AND RELIGION

On March 7 and 8, 1963, the Medical Society of the State of North Carolina sponsored, with the N. C. Mental Health Association and N. C. Mental Health Council, a **Leadership Conference on Action for Mental Health** at the Sir Walter Hotel in Raleigh. We were most pleased with the success of this Conference as 957 delegates from various civic, religious, professional and governmental organizations registered for the meeting.

As arranged by the Committee under Dr. Allyn Choate, Dr. Lindsay Beaton, Vice-Chairman of the AMA Council on Mental Health addressed a general session at the Annual Meeting of the Medical Society of the State of North Carolina in Asheville, held in May, 1963. At this meeting also, the House of Delegates officially adopted a Statement of Principles of Mental Health which was patterned after the similar AMA Statement. During this session, the Medical Society also endorsed pending legislation designed to coordinate the mental health services in the state by the creation of a Depart-

ment of Mental Health. This bill was passed into law by the State Legislature the next month.

In an effort to avoid adding any more new committees to the multi-committeed organizational structure of the Medical Society, it was decided that the concern of medicine and religion be included in the area of responsibility of the Mental Health Committee. Accordingly, the name of the Mental Health Committee was enlarged to the Committee on Mental Health and Medicine and Religion.

At the September meeting of the new Committee, it was decided that the activities of the Committee should be divided into subgroupings so that appropriate action could be taken on each of the various topical areas of concern. Accordingly, the following subcommittees were appointed: Physician Education (Dr. Charles Vernon, Chairman); Public Education (Dr. Hazel Zealy, Chairman); Children's Services (Dr. L. J. Thompson, Chairman); Alcoholism (Dr. Tom Jones, Chairman) and Medicine and Religion (Dr. Dan Martin, Chairman). Each of these subcommittees met during the Fall and outlined respective lists of suggested mental health activities to be carried out at the local level by County Medical Society Mental Health Committees.

Through a grant from the AMA Department of Mental Health a **Program Guide for County Medical Society Mental Health Committees** was printed to instruct and orient local mental health committeemen and to outline a coordinated list of responsibilities as designated by each of the respective subcommittees. The Guide was designed to present in a readable, concise form the activities which we felt the County Medical Society Mental Health Committees should undertake.

On March 14 and 15, a Conference for County Medical Society Mental Health Committeemen was held at the Sir Walter Hotel in Raleigh to present to them the Mental Health and Medicine and Religion Program of the Medical Society. Out of state speakers for this program included Dr. Lucy Ozarin, National Institute of Mental Health; Dr. Benjamin Wiesel, Hartford, Conn.; Dr. Charles L. Hudson, AMA Board of Trustees; Dr. Marvin A. Block, Chairman of the AMA Committee on Alcoholism and Dr. William F. Sheeley, Chief, American Psychiatric Association General Practitioners Project and Rev. Arne Larson, Assistant Director, AMA Department of Medicine and Religion. The program was co-sponsored by the N. C. Department of Mental Health. The chairmen of the Mental Health Committees for the Medical Auxiliary were also invited to attend.

The Committee has also worked very closely with the N. C. Mental Health Planning Staff in developing a comprehensive plan for mental health in North Carolina. A major step in this planning is for the formation of county mental health councils. We are most pleased that the presidents of county medical societies were selected to take the initial step in the formation of these local councils.

The success to date which the Mental Health Program of the Medical Society has enjoyed has been largely due to the efforts of Dr. John Rhodes, President; Dr. John Kernodle, Past President; Dr. Edgar Beddingfield, Legislative Chairman, Dr. Allyn Choate, Past Committee Chairman, and the untiring efforts and cooperation of the State Medical Society Office directed by Mr. James Barnes.

John L. McCain, M.D.
Chairman

SUBCOMMITTEE ON PHYSICIAN EDUCATION COMMITEE ON MENTAL HEALTH AND MEDICINE AND RELIGION

The Subcommittee on Physician Education of the Committee on Mental Health and Medicine in Religion met Sunday, November 10, 1963, from 10:30 a.m. to 1:00 p.m., at the Medical Society Office, 203 Capital Club Building, in Raleigh, North Carolina.

Present were the following:
Charles R. Vernon, M.D., Chairman
John L. McCain, M.D., Chairman, Committee on Mental Health and Medicine in Religion
Ernest W. Furgurson, M.D.
C. O. Plyler, Jr., M.D.
J. T. McRae, M.D.
Hans Lowenbach, M.D.
N. E. Stratas, M.D., Director of Professional Education, State Dept. of Mental Health
D. A. McLaurin, M.D.
Mr. R. O. Pickard, Planning Staff of Mental Health Council
Mr. James T. Barnes
Mr. William N. Hilliard
Miss Kay K. Zeigler

Dr. Charles R. Vernon, Chairman, presided over the meeting. The Committee reviewed postgraduate educational opportunities in the area of psychiatric education for non-psychiatrists that have gone on in the state in the past year. Dr. McLaurin reported on the postgraduate courses that the Academy of General Practice sponsors. Five hundred and ninety hours of formal training have been given since November 1962. One hundred and four hours were devoted to psychiatric education. Dr. Lowenbach reported on a course he led in Pitt and Wayne counties. Starting in December, 1963, Dr. Lowenbach will be at Watts Hospital, Durham, N. C., for an hour and a half one day a week for house staff consultation. Bowman-Gray has a program in which a physician can come in to the psychiatric clinic one afternoon a week to work with the psychiatric staff. The University of North Carolina is continuing the topic oriented programs on the one-way radio. UNC has continued its annual series of seminars on both psychiatric topics and cases. Dr. Joseph J. Cutri is continuing his program in

several counties. The Committee concluded there is a lack of opportunity for psychiatric education available to physicians throughout the state, although there are increasing efforts to offer such opportunity.

The Committee agreed that all programs in progress now should be continued; however, while more courses in the form of seminars and conferences are made available, the Committee should also devote its energies to getting the physician to thinking "psychiatric." Dr. McLaurin suggested a method called "Shop Talk," that has been used by the Academy of General Practice throughout the nation and in North Carolina. "Shop Talk" is a tape recording of a discussion of a topic which is accompanied by a series of still photographs of the discussion group flashed on a screen. A trained discussion group leader in turn gets the group viewing the "Shop Talk" into a discussion of the topic. The Committee viewed a "Shop Talk" on cancer. It was recommended that Dr. McLaurin look into the possibility of having a "Shop Talk" made for this Committee to use in physician education. The Committee suggested that a meeting of county mental health chairmen in January before the Officers Conference would help get the program started on the county level. Dr. Marty Lakin of Duke was suggested as a possible speaker for this group to teach them sensitivity training. Other techniques that might be utilized in the future for non-psychiatrist education are: (1) Seminar series method; (2) One 3-day conference; (3) Participation in training programs already going at the medical schools or training institutions; and (4) Traveling teaching clinics.

It was agreed that there should be considerable effort on the part of the Mental Health Committee to help coordinate the planning efforts that are now being initiated through the Mental Health Council and its planning staff. Once there is a mechanism for local planning, this will be an ideal channel through which educational efforts can develop. Hopefully it will be feasible to develop programs and consultative services in all areas of the state.

There was no further business. The meeting was adjourned.

Charles R. Vernon, M.D.
Chairman

SUBCOMMITTEE ON PUBLIC EDUCATION of the COMMITTEE ON MENTAL HEALTH AND MEDICINE IN RELIGION

(See Report on Page 59)

SUBCOMMITTEE ON CHILDREN'S SERVICES COMMITTEE ON MENTAL HEALTH AND MEDICINE IN RELIGION

The Subcommittee on Children's Services, Committee on Mental Health and Medicine in Religion. met Sunday, October 27, 1963, from 1:30 p.m. to 4:00 p.m., at the State Medical Society Office, 203 Capital Club Building, Raleigh, North Carolina.

Present were:

Lloyd J. Thompson, M.D., Chairman
John L. McCain, M.D., Chairman, Committee on Mental Health and Medicine in Religion
Wayland N. McKenzie, M.D.
L. J. Lewis, M.D.
Kenneth B. Geddie, M.D.
Rex W. Speers, M.D.
Mary Margaret McLeod, M.D.
Mr. R. O. Pickard, Planning Staff of Mental Health Council
Mr. James T. Barnes
Mr. William N. Hilliard
Miss Kay K. Zeigler

Dr. Thompson presided and reviewed the previous report of the subcommittee on Mental Health for Children which was prepared for the Steering Committee on Mental Health during the present year. In view of the fact that most of the members of that subcommittee are on the present subcommittee, it was decided that the previous report would serve as a basis with certain changes for the present report which will be presented to the Mental Health Committee in January 1964.

As a result of the discussions and additional recommendations the report is as follows:

The Joint Commission on Mental Illness and Health in its report to Congress ("Action for Mental Health") did not cover to any extent the field of child psychiatry, including mental retardation, delinquency, etc., nor was there any suggestion of a program concerned with primary prevention. Accordingly, this subcommittee urges recognition of the fact that services for children are just as important in the field of mental health as all other services.

It was agreed that this subcommittee should be concerned with all aspects of primary prevention as well as with the promotion of facilities for early diagnosis, proper and early treatment and adequate rehabilitative services for all children needing special attention, whether emotionally disturbed, psychotic, mentally retarded, specifically handicapped, neglected, etc.

At the same time it was recognized that separate programs are already in existence for the mentally retarded and the delinquent at national, state, and here and there at local levels. Such programs may continue to be dealt with separately and apart from the overall mental health programs for children, but the overlapping must receive due cognizance. Cooperation and coordination between any of these special programs and the overall mental health activities can be accomplished through frequent consultations, educational programs and other joint efforts at all levels.

Great strides have been made in quite recent years in the field of mental retardation due to discoveries of causes, to public (mostly parental) interest and now to governmental support of re-

search and services. This progress has stirred the interest of pediatricians, obstetricians, psychiatrists, neurologists, and other members of the medical profession as well as the interest of psychologists, social workers, educators, etc. The programs, already initiated in this field, should have "full rein" and support but as just mentioned, in coordination with other health activities.

The "Child Health Supervisory Clinics" as recommenoded in the mental retardation program, and as planned and already established in a few places in North Carolina by the State Board of Health, should be concerned with all child health problems —including behavior and emotional disturbances, and not be limited to mental retardation. Such clinics should focus attention on the early years of life and not become bogged down with a case load of full-blown chronic disorders in older children.

These community child health supervisory clinics properly staffed with trained personnel, including pediatricians, psychologists, social workers, public health nurses and, when feasible, a consulting child psychiatrist should work closely with physicians and other sources of referral for screening purposes. Some temporary treatment will be necessary in the clinics, but for more definitive treatment and special studies there should be referral to mental health clinics, evaluation clinics for the mentally retarded, child guidance clinics, pediatric neurology clinics, etc. Quite often, the referral might be, with recommendations, back to the family physician, the school, the social agency, etc., or "in-patient" placement might be indicated.

Concerning priority areas of need. the following are listed:

1. Stimulating the interest of family physicians —be they general practitioners, pediatricians, internists or even obstetricians in all aspects of mental hygiene in childhood. Attention of the subcommittee on Physician Education is called to this point. Also, the topic should receive more attention in medical schools.

2. There must be more local mental health clinic programs to augment the services of family physicians, health and welfare agencies, and the schools for the screening and treatment of children with various kinds of disabilities that might become chronic.

3. There must be sufficient specialized evaluation centers for the proper diagnosis of serious disorders, particularly mental retardation. At the same time, sufficient centers for the diagnosis and treatment of psychotic and severely emotionally disturbed children—including residential care, must be established.

Finally, this subcommittee recognizing the need for improving all standards of child care, recommends that special attention be given to the perinatal, infant, and pre-school periods of life by further development of consultative, educational, research and service programs in various fields of health, education and welfare. In all such activities physicians should be aware of the opportunities and obligations to participate and lend their knowledge and leadership.

Without precise scientific validation of the preventive value in every step, common sense suggests the following programs, directed toward preservation of both mental and physical health:

1. Pre-marital examinations by physicians with due consideration of mental health aspects including genetics. The law requires a medical examination before marriage, but usually this consists of only a "blood test." This is an opportune time for the physician to participate in counseling concerning not only sexual matters but in broader aspects of adjustment and planning. (References to literature on this topic are appended.) Also, premarital classes with group discussion participated in by doctors, nurses, ministers, psychologists, social workers, marriage counselors, etc., are in order. Individual counseling by any members of the above mentioned professions is recommended. Courses in high school and college that contain subject matter related to marriage and child rearing are also recommended.

2. Pre-natal classes for expectant parents and individual attention during this period by doctors, nurses, public health agencies, etc. (Expectant fathers should be included as much as possible.) These pre-natal classes, under medical direction, should include discussion of the emotional problems of pregnancy, delivery and early child care with anticipatory guidance.

3. Natal and neonatal services with attention to the many and varied mental health aspects by obstetricians, pediatricians, other doctors, nurses, child welfare and placing agencies. "Natural childbirth" and "rooming-in" are important considerations in this connection.

4. In well-baby clinics and in private pediatric practice, attention should be given to the multitude of chances to enhance mental health as well as physical health and development. Eating, sleeping, and elimination problems may be obvious warnings of widespread emotional problems before and after the age of two. There should be a continuation of class discussion groups for parents with professional guidance.

5. For the child from 2 to 4 years of age:

A. Continuation of class discussion groups for parents;

B. Continuation of pediatric and nursing attention to the mental health implications of all developmental problems;

C. Introduction of nursery schools, day nurseries, and play groups when indicated. In the study of the needs for such programs the physician has an important contribution to make. The same applies to the placement of young children in foster homes and their further adjustment therein;

D. Introduction of study and treatment facilities for children of this age with faulty habit formation, emotional maladjustment, mental retardation, etc.

6. For the child from 4 to 6 years of age:

A. Continuation of discussion groups for parents—anticipating P.T.A.;

B. Continuation of pediatric, nursing, "GP," attention to all aspects of social-emotional development;

C. Kindergarten attendance for practically all children of this age with an extention of public school responsibility down to the age level of four.

D. Same as D. under 5.

E. Psychological and related studies of all children before they enter the first grade. This should be in conjunction with and supplementing the preschool physical examinations.

7. For the child of school age:

A. Continuation of parent education through P.T.A., etc.

B. Early recognition and diagnosis of special abilities and disabilities with provisions for meeting the educational needs in public schools as far as possible. More exact, diagnosis and prognosis for the mentally retarded will help the schools provide the necessary facilities for the "trainable" and "educable" children of this group. The medical treatment and prevention of mental retardation grows more challenging day by day. At the same time, the exceptionally gifted children should be "diagnosed" early and given educational opportunities geared to their rate of development along with cognizance of their social-emotional development.

C. Early diagnosis of language disabilities (speech, reading, writing, and spelling), with adequate facilities to meet the needs of such children in public schools. (Two to three per cent of children have speech defects while almost ten per cent are two years or more retarded in reading.) Whether these disabilities are due to emotional problems, to innate endowment, or more rarely, to brain damage, the fact remains that most of these children can be helped. The colleges of the state that enter into teacher training should produce more speech specialists and remedial reading teachers. The State Department of Public Instruction should encompass the problem of reading disability in its programs for exceptional children. It is recognized that reading retardation is a fundamental cause of school dropouts, and plays a role in delinquency, unemployment, and "the cycle of poverty."

D. Guidance counselor services with the employment of psychologists and social workers by the public schools should be expanded.

E. Many other areas could be added to this list as the child grows older, but it is felt that the above suggestions form a working basis.

Premarital Medical Examination

The Premarital Examination. Eleanor B. Easley, M.D. N. C. Medical Journal, 15:105-110, 1954.

Premarital Medical Examination. Nadina R. Kavinoky, M.D. J.A.M.A. 156:692-695, 1954.

The Premarital Examination. Paul Scholten, M.D. J.A.M.A. 167:1171-1177, 1958.

Premarriage and Marriage Counseling. C. Nash Herndon, M.D., and Ethel M. Nash. J.A.M.A. 180: 395-401, 1962.

Man and Wife. Emily H. Mudd and Aron Krich. New York. W. W. Norton & Company, 1957.

Books for Bride and Groom

When You Marry. Evelyn M. Duvall and Reuban Hill. Boston. D. C. Heath & Company, 1953.

Your Marriage. Norman Hines and Donald L. Taylor. New York. Rinehart & Company, 1955.

Sexual Responsibility in Marriage. Maxine Davis. New York. The Dial Press, 1963.

Pamphlets for Bride and Groom

So You Are Going to Get Married. Philadelphia Marriage Council.

Your Marriage: N. Y. Dept. of Mental Hygiene, 1959.

Perinatal Period

Books for Professional Use

Maternal Care and Mental Health. John Bowlby, M.D. Geneva. World Health Organization.

Training for Childbirth. Herbert Thoms, M.D. New York. McGraw-Hill Book Company, Inc.

Books for Expectant Parents

Pregnancy and Birth. Alan F. Guttmacher, M.D. New York. The Viking Press, Inc. 1957.

Preparing for Parenthood. Samuel R. Meaker, M.D. Chicago. The Year Book Publishers, Inc., 1956.

Childbirth with Understanding. Herbert Thoms, M.D. Springfield, Illinois, Thomas Company, 1962.

Pamphlets for Expectant Parents

Prenatal Care. U. S. Dept. H. E. W.

Preparing for Parenthood. Metropolitan Life Insuurance Company.

Having a Baby. Public Affairs Pamphlet No. 178.

Pierre the Pelican. (Prenatal and Postnatal series.)

Marriage Counseling in Medical Practice. A Symposium. Edited by Ethel M. Nash, M.A., Lucie Jessner, M.D., and D. Wilfred Abse, M.D. Marital problems can have medical consequences—and therefore marriage counseling should have a place in medical practice, and medical education should prepare the physician for his role as counselor. These interlocked theses are the basis for this challenging book, edited by a marriage counselor and two physicians, and consisting of twenty-two contributions, most of them by physicians.

The volume approaches the general topic of marital problems in medical practice on a broad front from the viewpoint of the practicing physician, and relates marital problems to the work of the general practitioner and such specialists as the obstetrician, the gynecologist, the pediatrician, and the psychiatrist. There are chapters on such subjects as counseling help for alcoholic

marriages, pregnancy as a stress in marriage, the problems of teen-agers and the unmarried woman. There are sections on the techniques of premarital counseling and on the concepts of marital diagnosis and therapy.

Marriage Counseling in Medical Practice will have a special interest to medical educators, as it develops in its concluding section a number of proposals for education in marriage counseling at the level of the medical undergraduate, in house officer training, and in postgraduate courses and publications. It also projects a program for the training of marriage counselors as a recognized addition to paramedical personnel. Thus while this volume will be of primary value in the medical field, it will also be of interest to a variety of informed readers in related professions and in the general area of the social sciences.

Lloyd J. Thompson, M.D.
Chairman

COMMITTEE ON MENTAL HEALTH SUBCOMMITTEE ON MEDICINE AND RELIGION

I am sorry that I do not have anything definite to report as Chairman of the Society's Subcommittee on Medicine and Religion. As you probably know, I accepted this chairmanship only a short time ago and no activities other than the proposed meeting on the 14th and 15th of March have occurred.

Dan A. Martin, M.D.
Chairman

SUBCOMMITTEE ON ALCOHOLISM COMMITTEE ON MENTAL HEALTH AND MEDICINE IN RELIGION

The Subcommittee on Alcoholism of the Committee on Mental Health and Medicine In Religion met Thursday, October 31, 1963, from 7:30 to 9:00 p.m.

Present were Thomas T. Jones, M.D., Chairman, Subcommittee on Alcoholism; John L. McCain, M.D., Chairman, Committee on Mental Health and Medicine in Religion; Benjamin H. Kendall, M.D.; Donald E. MacDonald, M.D.; Mr. R. O. Pickard, Planning Staff, Mental Health Council; Mr. James T. Barnes; Mr. William N. Hilliard; Miss Kay K. Zeigler; Miss Ruth E. Stenquist.

Thomas T. Jones, M.D., presided over the meeting, and introduced the purpose of the meeting with a brief review of the development of interest in problems of alcoholism in this state and on the national level, up to the adoption of a resolution of the House of Delegates of the American Medical Association that "Alcoholism is an illness, and therefore a medical responsibility."

A general discussion was stimulated embracing exchange of information about the many local and state resources already in operation, the establishment of local Councils and Information Centers on Alcoholism, and the programs introduced or planned in many communities. It was particularly noted that the Alcoholism Rehabilitation Program of the state had been instrumental in generating widespread interest in the problem, and through its unique treatment centers at Butner and Goldsboro, had effected a significant recovery percentage in total patients treated.

The impact of Alcoholics Anonymous fellowships throughout the state was reviewed, as well as the influence of the spiritually-oriented retreats, Information Centers, Church-directed activities, the Salvation Army, private sanatoria and the Flynn Christian Fellowship Homes.

In general, it was felt that this Subcommittee should be small, with its members easily accessible for regular meetings. Also, it was felt that the interest and services of additional personnel, recruited from other disciplines, paramedical areas and nonmedical sources, could add to the effectiveness of this Subcommittee by bringing different points of view and helpful suggestion, in the role of consultant or advisory membership.

A list of projects that might fall within the scope of the purpose of this Subcommittee were discussed, but priority was given a few that were considered most urgent; as follows:

1. Organization of Subcommittees on Alcoholism in each county medical society within the framework of the projected or existing Committee on Mental Health and Medicine in Religion of the county.
2. Through these Subcommittees, arousing interest among physicians that problems of alcoholism are properly a medical responsibility.
3. Contribution to physician education in the effectiveness of new approaches to treatment of the alcoholic, encouraging physician-participation in community resource development, with emphasis upon the need for continuity of care of the alcoholic patient in the phases of acute and chronic illness and rehabilitation.
4. The dissemination of information in the areas of early case-finding, prevention, public education, as well as more understanding and application of knowledge and experience already available as problems of alcoholism affect patients seen or attended for other reasons or purposes.

A more thorough discussion of the various facets of concern with the illness of alcoholism, the influence of the alcoholic within the family group, and the problems the alcoholic creates within the community revealed that there were many additional objectives this Subcommittee might properly consider. An incomplete list is suggested.

1. A more realistic nomenclature with broader acceptance and utilization.
2. Exploration of the feasibility of making alcoholism a reportable disease.
3. Reappraisal of the practical application of tests of intoxication for medico-legal purposes.
4. Review of present laws concerning applica-

tion to problems of alcoholism and the disposition that would best serve BOTH the alcoholic and the community, with long-range realism.

5. An increased concern for institutional treatment of the alcoholic with emphasis on continuity of care as the alcoholic returns to the community and family.

6. Coordination of available resources for help within the community.

7. Development of programs, and participation in those programs in all communities, within limits of potential of any given community.

8. Decisions to include or exclude problems of drug addiction within the scope of this Subcommittee.

9. Stimulation of programs of physician education, and education of non-medical groups concerned with problems of alcoholism.

10. To engage the interest of hospital administration directed toward acceptance of the acutely ill alcoholic for admission and treatment.

11. To interest industrial programs on alcoholism.

12. Together with the Subcommittee of Medicine in Religion to foster and promote increased interest of the Church in problems of alcoholism.

13. To stimulate and encourage physician attitude toward:

a. Prevention through education.

b. Early case-finding by raising the index of suspicion to symptoms of early behavior patterns aroused by alcohol beverage excess.

c. More adequate history-taking that would reveal potential alcoholism.

d. Greater concern and continuity of care for the potential or actual alcoholic.

e. Realization that alcoholism is not only a many-faceted illness, and an acquired "way of life," but in a larger sense it is a family and community concern.

14. The investigation of insurance liability and responsibility.

15. To volunteer and cooperate with education about alcohol and alcoholism in public schools.

16. To participate in already-existing local and state programs as representative of the interest of the medical profession.

17. To volunteer aid in appraisal of scope and impact of alcoholism in the community service and welfare aid of the community.

18. To help with a better understanding that some types of treatment and help for the alcoholic may make him more helpless, and increase his dependency.

Thomas T. Jones, M.D.
Chairman

COMMITTEE ON NECROLOGY

The report of the Committee on Necrology will be given at the Memorial Services Sunday evening, May 3, 1964, at 8:00 P. M. in the Town Hall at the Coliseum.

The Auxiliary will also participate in this Memorial Service for the deceased physicians and Auxiliary members.

Chas. F. Pugh, M.D.
Chairman

COMMITTEE ON NEGOTIATIONS

The Committee on Negotiations has had no problems referred to it for negotiations this year, and has held no meetings.

William F. Hollister, M.D.
Chairman

NOMINATING COMMITTEE

(Makes report to the First Meeting of the Annual Meeting of the House of Delegates, Sunday, May 3, 1964.)

COMMITTEE OF PHYSICIANS ON NURSING

The Committee of Physicians on Nursing of the North Carolina Medical Society has had a very busy and interesting year. Much time and study has been given the matter of professional relationships and the image of this modern relationship between the two professions. It is no longer a matter of doctor and nurse, but the modern concept of the services of the two professions now must be keyed, not only to the professional duties of the members of the nursing profession, but on a basis of political, social and economic conditions. The status of these matters has changed greatly within the past twenty-five years and affect not only the working patterns of the nursing profession, but have a profound influence on the type of patient care which is expected this day and time by the people.

The Committee is trying to evaluate these changes both from a state and national level, and to place emphasis where we feel it belongs, primarily on the nursing situation as it affects North Carolina.

During the past twenty-five years the nursing profession has emerged from a poorly organized profession into one that is highly organized at the present and has very capable leadership. They have adopted certain policies and educational goals which are commendable, and which the medical profession seeks to support and at the same time be assured that the accomplishment of these aims do not work to the detriment of the general supply and adequate patient care for our people. We believe and are anxious to support better educational requirements and facilities for nurses. At the same time we are anxious to help in educating a number which is adequate for the nursing care of our people. There is at present a shortage of nurses in this country and it is estimated that by 1970 the shortage will be greatly increased.

The Committee feels that there is a need for stimulation of recruitment for the nursing profes-

sion beginning with the Careers Programs which are underway in North Carolina, and extending right on up from high school into the graduate schools of nursing and the collegiate courses which are being offered. There needs to be an upgrading in physical and teaching facilities from a level of the LPN through the baccalaureate course in nursing. Our Diploma Schools in the State of North Carolina are woefully inadequate in both of these. As a result, we rate very low in the scale, not only in the nation, but even in the south. As a matter of fact, we stand to lose some of our Diploma Schools, from which we get most of our nurses, as a result of inadequate and poorly qualified teachers and poor facilities for teaching.

The Committee of Physicians on Nursing is studying all of these matters carefully with the idea of correcting them as fast as possible. The matter of loans to students, legislation to supplement the shortage of teachers and inadequate facilities, both on the part of the state and federal government is under serious consideration. At the present the hope for an accomplishment of these aims looks bright. We have, during the past year, had joint meetings with leaders of the nursing profession in North Carolina, with members of the State Hospital Association, the League of Nursing, the North Carolina Committee on Higher Education, and the Medical Care Commission to discuss our problems and get suggestions as to how to proceed toward our goal. The Committee on Higher Education is at present conducting a survey of the problems of the nursing situation in North Carolina and will probably have a report before this is in print. We feel that this report may solve some of the problems as to the actual conditions in North Carolina, and pave the way for subsidizing nursing schools, particularly the Diploma Schools so that we can make real progress, not only in recruitment but in better training for our nurses. Only in this way can we hope to have adequate nursing services that meet present day requirements, professionally and socially, in North Carolina.

I might add that the AMA as recently as February 13th to 16th, inclusively, sponsored a joint meeting with the ANA to study the problems of "medical and nursing practices" in the changing world. The idea was to promote better relations and liaison between the two professions and promote better relationships to the end that better patient care may be achieved in our country.

The Surgeon General's Committee on Nursing has made a report and is furthering their study in the solving of problems in connection with the shortage of nurses in the nation, and have made recommendations which we hope will result in financial aid from the government as well as from the state.

Your Committee of Physicians on Nursing met on September 28, 1963, at Southern Pines, at which time we had as our guests Miss Mary E. Copeland, President, N.C.S.N.A., Mrs. Nell R. Peele, Health Careers for North Carolina, and Miss Jeanne Riddle, Secretary N.C.S.N.A. Many problems in present day nursing were discussed. It was brought out that bedside nursing, the true mission of the nurse, is being by-passed because of the added clerical duties, etc., which the nurses have had to take over, thereby passing the bedside nursing on to subprofessional workers, and the effect of this on patient care.

It was brought out also that 25% of the nurses of the state failed to pass the State Boards in 1962. Most of these applicants were from the smaller schools. This, as mentioned before, is the area in which upgrading seems to be most needed.

Miss Copeland, President, N.C.S.N.A., spoke of "Objectives and Needs of Nursing in North Carolina." She discussed the matter from the standpoint of professional practice, nursing education, research, nursing service, legislation, economic security, and clinical interests. These problems were discussed briefly by the Committee in the light of North Carolina significance chiefly.

Discussion was had on the "Work of the Health Careers for North Carolina." Mrs. Peele gave us a very interesting talk on the present status and trend of health careers in North Carolina.

The second meeting of the Committee of Physicians on Nursing was at High Point Memorial Hospital January 16, 1964. The meeting was opened with a statement of the needs for a positive approach toward defining a program in nursing education in North Carolina. The Committee was urged to consider possible ways of cooperating with hospital staffs, boards of hospitals, and nursing groups to find out what their needs are in the area of nursing and to help them get it. The Medical Care Commission's program of educational loans and scholarships for nursing was discussed. Also, the loans by the government. Another item was the cost of nursing education to the hospital with private schools of nursing. The possibility of applying for subsidies from the state legislature for private nursing schools was discussed and a resolution adopted as follows:

"The Committee of Physicians on Nursing is interested in and concerned about improving the nursing educational facilities and opportunities in North Carolina.

"Modernized, better equipped and staffed nursing schools, supported with funds from broad financial bases, are essential to attract students into nursing as a career in increased number and to graduate the well-trained nurses that are required to continue to provide the high quality health care that is desired.

"To receive more information about nursing education in North Carolina and to discuss how the Medical Society can be of service in promoting improved nursing education, a follow-up meeting of this

Committee will be held on Thursday, March 5, 1964, in Burlington to which representatives from the NCNA, NCLN, NCHA and resource persons from the N. C. Dept of Education will be invited to attend."

(This resolution was submitted as information to the Executive Council meeting, January 26, 1964, at the Carolina Hotel, Pinehurst, N. C.)

The third meeting of the Committee was on March 5, 1964, at the Holiday Inn Restaurant at Burlington, N. C. At this meeting the following invited guests were in attendance:

Mrs. Marie Noell, Secretary, N. C. Nursing Association

Miss Shirley Callahan, Durham County Public Health Nursing Department

Mr. Ed Heyd, N. C. Hospital Association

Mr. Joe Barnes, N. C. Hospital Association Committee

Miss Edith Brocker, State Nurses Association

Mr. Marion Foster, N. C. Hospital Association.

Miss Carrie Spurgeon, N. C. Board of Nurse Education and Registration

Miss Janet Campbell, N. C. League for Nursing

Mr. William Henderson, N. C. Medical Care Commission

Dr. Howard Boozer, N. C. Board of Higher Education

The chief objective of this meeting was to discuss with members of different state agencies and organizations our problems and ways and means of upgrading and subdizing by legislative action for the nursing schools of the state, particularly the Diploma Schools which have the greatest need. Nursing education through the years seems to have been the red headed stepchild in the educational field. Unlike the medical, dental and engineering schools, they have had no financial support from the state and it was the feeling of those present that something needed to be done in this area. Subsidizing of the Diploma Schools has been opposed to a certain degree by the ANA.

After a briefing of objectives of the matter by the Chairman, Mr. Howard Boozer, member of the North Carolina Board of Higher Education, was called on to discuss the interests in the profession of nursing from the standpoint of the program of the Board of Higher Education. He pointed out that the Act of 1963 creating the community colleges in North Carolina placed the plan of coordination with these of the Board of Higher Education. He stated that the North Carolina Board of Higher Education has under consideration a survey of the nursing needs in North Carolina, and at present was interested in getting all information from whatever source possible on this matter. The survey is being made jointly with the North Carolina Medical Care Commission and is being carried out under the direction of Mr. Ray Brown. This is the report mentioned previously. This report, I might add, is primarily to ascertain what the needs of nursing in North Carolina are. Free expression was given by other guests at the meeting relating to the problems of hospital schools of nursing, costs, education, and the correction of these problems. In brief, this meeting was marked by a positive approach to the problems at hand by everyone present and was productive of new avenues of thought to those problems. Furthermore, it seemed to enhance the spirit of cooperation which existed in the minds of those present toward the solving of our problems.

Finally, I want to say that I feel that the spirit of cooperation and coordination of objectives has been appreciably promoted between the nursing and medical professions as a result of our joint meetings during the year. It is my hope that the report of nursing education by the North Carolina Board of Higher Education, as well as the Surgeon General's Committee report, will point out ways and means of obtaining the objectives which we seek in North Carolina and the nation, which to repeat, is upgrading all the levels of nursing education in our country, the main objective of which is better patient care for the sick.

I want to thank Mr. James T. Barnes, Executive Director, N. C. State Medical Society, and Miss Kay Zeigler, Field Consultant, for their support in helping to carry on the work of the Committee during the year.

Fred C. Hubbard, M.D.
Chairman

COMMITTEE ON OCCUPATIONAL HEALTH

The Chairman represented the Society at the Annual Congress on Occupational Health held in San Francisco, California, on September 24, 25, and 26, 1963.

The Committee met at Pinehurst at the annual conclave in September. The Committee discussed the possibility of an examination of the Society members at the next annual meeting and plans for further study were made. Dr. W. L. Wilson, Chairman, Occupational Health Section, North Carolina State Board of Health, made a preliminary study of this project with the cognizance of all parties concerned. It was concluded that such a project needed detailed planning and that it would be more feasible to continue the study and planning for the annual meeting in 1965 rather than 1964. This is to be continued with its progress being followed by the Committee and final plans are to be submitted to the Executive Council for approval.

J. M. Hall, M.D.
Chairman

COMMITTEE ON POSTGRADUATE MEDICAL STUDY

I have nothing further to add to the original report on my committee which was sent in immediately after the meeting in Mid Pines.

At the meeting in Mid Pines the committee unanimously agreed to offer its services to any and all

of the Medical Societies in helping them secure programs, out of town speakers, and in any way possible to further post graduate medical study.

We felt that the many seminars and extension courses now being offered by the three medical schools of this state adequately covered that field as well as the numerous activities of the American Academy of General Practice.

There have been several requests for programs which have been easily filled by the committee. Therefore, I would like to submit my original letter as the report to the Executive Council for their consideration.

I met with Chalmers Carr the other night to discuss the committee activities relative to the 1965 convention. I am sure that you will hear from Chal on this and we will do everything possible at this end to ensure a successful meeting.

Marvin N. Lymberis, M.D.
Chairman

COMMITTEE ON PUBLIC RELATIONS

This committee met in September during the regular committee meetings times designated by the state society. That meeting was devoted to outlining the plans for the year with particular reference to the Officers and Committeemen Conference that was held January 25 at Pinehurst. This year's conference was the best attended with a total registration of 169, 118 of which were physicians. This represented 40 counties and the increased attendance was encouraging.

An Information Book to be distributed to new state society members was completed and is in the process of being distributed to all our new members during the past two years as well as to any other member who desires one.

The annual AMA Institute was held in Chicago during August and was attended by your chairman, the president, president-elect of our state society, as well as the president, president-elect, and Public Relations Chairman of Mecklenburg County. As usual, this is a most informative and productive assembly and should be attended by officials of other counties of our state.

A Health Fair, the first of its kind, is to be held April 1-4 this year at Durham. This is an outstanding achievement and the Durham-Orange County Society is to be commended for its effort to interest high school students to enter the field of medicine and its allied professions. This committee has been actively associated with the Health Fair Committee in its planning.

The Public Relations Bulletin continues to keep our members informed. Our state booth at the Raleigh State Fair was again a successful venture. Many other routine affairs of public relations are performed through the office of Bill Hilliard, who deserves special commendation.

Philip Naumoff, M.D.
Chairman

COMMITTEE ON PHYSICAL REHABILITATION

Four of the eight member committee, with Dr. Thomas Thurston as Public Service Commissioner, were in attendance.

A report of the North Carolina Division of Vocational Rehabilitation entitled "Scope and Basis of Vocational Rehabilitation" was read and discussed. Five thousand clients were rehabilitated by this department in the past fiscal year. Fourteen (14) physical restoration services can be furnished by the agency to eligible clients. Eligibility is determined by several criteria, i.e., the clinical status, age, prognosis for improvement, and financial need. The Committee requested a breakdown of the clients treated, and gave specific recommendations regarding handling of the amputee patient from gait-training to the selection of the limb maker. Finally, a plea was made urging the Department to treat the client locally wherever possible.

The Committee recommended that specialized rehabilitation in nursing homes and home care programs be turned over to the Committee on Chronic Illness. It was also the consensus of opinion that the Committee on Eye Care and Eye Bank might very well be combined with the Committee on Physical Rehabilitation.

"A Directory of Rehabilitation Services in North Carolina," prepared by the North Carolina Physical Therapy Association, was reviewed and approved. Notice of its availability was to be placed in the State Medical Society bulletin at $1.00 per copy.

Walter S. Hunt, M.D.
Chairman

COMMITTEE ON RURAL HEALTH

The Committee met in Pinehurst on September 26, 1963, and agreed upon the following projects and programs for the year.

(1) More active cooperation and encouragement with county medical societies to appoint rural health chairmen within the medical societies, to provide better communication between the state and medical societies, to encourage the development of Citizens' Committees in each county similar to that which has been developed in Duplin County.

(2) To act as a source of communication and liaison between the county medical societies and the people.

(3) To encourage 4-H Club Health Improvement Program by

(a) Urging the county medical societies to give subscriptions to "Today's Health" magazine to school libraries in honor of the 4-H Health Winner and also to encourage county rural health chairmen to participate in County 4-H Health Programs.

(b) To sponsor one trip to the National 4-H Club Congress for the state health winner. This was done.

(4) Continue close liaison with major agricul-

tural organizations such as Extension Services. Farm Bureau, Grange, 4-H Clubs.

(5) Continue participation with North Carolina Rural Safety Council.

(6) Continue advisory committee and hold at least one joint meeting in the year to assist in the planning of major activities.

(7) To offer the services of the Rural Health Committee as an advisory body, to state organizations interested in community health improvement.

(8) To offer services of the State Committee to serve on speaker's bureau for farm and rural organizations.

(9) To encourage county rural health committees, to offer speakers and their services to civic organizations within the county.

(10) Continued emphasis to be given to the Tetanus Toxoid Immunization.

(11) Attendance and participation in the A.M.A. Council on Rural Health.

(12) To urge the formation of a Traffic Safety Committee of the Medical Society for the purpose of:

(a) Preparing standards of physical fitness for automobile drivers.

(b) Studying the factors leading to death and destruction on the highways.

(c) Reporting recommendations to the Motor Vehicles Division.

(13) To urge that a more active interest in Tuberculosis be taken by members of the medical societies and the health departments. With 171 people dying of Tuberculosis in 1961 and 180 people dying in North Carolina of Tuberculosis in 1962 and with total patient days in the Sanatorium System in North Carolina in the fiscal year of 1961 and 1962 amounting to 429,970 and with the average stay of regular discharge patients having Respiratory Tuberculosis being 266 and with the expenditures of the Sanatorium System in the fiscal year of 1961 and 1962 being $4,925,153.00, it can be seen that Tuberculosis is far from a conquered disease.

The Medical Society should urge that the recommendations of the Governor's Advisory Committee on Tuberculosis be carried out, with reference particularly to skin testing and x-rays.

(14) To urge, in the interest of decreasing costs of hospitalization, that the Medical Care Commission, in approving new hospitals or hospital enlargement, give consideration to the construction of convalescent units within the framework of each acute hospital. With an aging population, this will be a matter of increasing importance in the passage of time.

(15) To urge cooperation with Health Careers, Inc., towards the end of procuring needed medical personnel throughout the state.

(16) Consideration and approval of budget.

To keep in close contact with developments in Rural Health on a national level the chairman of this committee attended the National Rural Health Conference meeting in Hot Springs, Arkansas, in September 1963.

Edward L. Boyette, M.D.
Chairman

COMMITTEE ON SCHOOL HEALTH

A. In September, 1963, this committee met in Pinehurst to formulate plans on its future activities. The committee invited Mr. Charles Spencer, from the Department of Public Instruction, who was kind enough to make the trip and answer all questions regarding school health funds. He also stated he wanted to work closer with this group and was quite interested in improving the school health program. His aims, as well as the committee's, was improved physical fitness programs in our schools, sensible athletic programs with more variety of sports so more children could be active, a more complete accounting of pre-school physical examinations, and a standardized medical examination form for all schools. Another meeting in the spring was to be made with Mr. Spencer.

B. The Medical Aspects of Sports Committee have run another study on football injuries. This year there was a vast improvement in school cooperation. Last year's limited study was prepared by Dr. Ted Scurletis and presented at the North Carolina Annual Coaches Clinic in Greensboro. Coaches were impressed and thus the improved cooperation. The coaches clinic has now accepted the medical aspects of sports section as a part of their annual program. A program is now being planned for the August, 1964, meeting.

C. The Medical Aspects of Sports Committee has also been asked to help formulate and sponsor the annual athletic injury meeting at the University of North Carolina. Dr. Barnes, committee chairman, presented a paper on Midget Football injuries at the September, 1963, meeting. The committee is now working on plans for a May 14, 1964, meeting at the University. A switch from September to May is done to encourage more coaches and physicians to attend these meetings.

D. A meeting with the North Carolina Dental Society will be held March 1, 1964, to work out school health problems. A joint program on dental and health problems is the aim.

E. School Health Committee is encouraging all medical men to talk to PTA's, coaches' meetings and civic clubs on the value of physical fitness and where local schools can improve on their own program. All schools having contact sports should have a team physician.

Frank E. Barnes, Jr., M.D.
Chairman

COMMITTEE ADVISORY TO STUDENT A.M.A. CHAPTERS IN NORTH CAROLINA

Perhaps the most important item to report on concerning Student A.M.A. activities with regard to the North Carolina State Medical Society for the year 1963-64 is the coordination of student representatives into committee activity. In Pinehurst on September 27, 1963, Mr. Harrold of Bowman Gray and Mr. Burroughs from the University of North Carolina spoke of their local chapter activties, organization, progress and future plans. A written communication from the Duke Chapter was read and filed. All during the fall chapter representatives were in close contact one with the other and two meetings were held in Dr. William Peete's office in Durham to stimulate activity and particularly to focus on the North Carolian State Medical Society to be held in Greensboro in the spring. Student plans for papers, for transportation and for participation were discussed.

The dinner meeting of the Student A.M.A. section at the State Medical Society Meeting in Asheville in 1963 went forward very satisfactorily although the distance prevented attendance by a large number of students. Dr. Edgar T. Beddingfield spoke most beautifully at this meeting. Three excellent student papers of the scientific merit were presented and the Duke representative won the award for the best paper.

Plans for the State Meeting and Student A.M.A. dinner have been under surveillance. The feature item for the 1964 meeting will be Dean Walter Reece Berryhill's address to the student body and those attending.

The members of the North Carolina Medical Society have always been completely cooperative in working with the Student A.M.A. Chapter. A striking feature of this year has been increased student participation, and it has been the committee's design to enhance and increase this over the long haul.

William P. J. Peete, M.D.
Chairman

INSURANCE INDUSTRY LIAISON COMMITTEE

This Committee is privileged and pleased to report a year which has been productive. Attendance at the four meetings has been excellent. According to long-established custom, we meet jointly with the State Committee of the Health Insurance Council representing the Insurance Industry. We have continued the custom of meeting in various areas of the state. The Committee now feels that it has reached certain of its objectives and that committeewise it has attained a certain adult status. Ventures into previously unplowed fields usually take a period of shakedown and education. Education is most particularly important in the area of health insurance because of its part in the medical and hospital economy today.

We have gained a bit of national recognition in this liaison effort as shown by the participation, by invitation, of some of our members in regional and national meetings dealing with voluntary health insurance. By way of these members, this Committee has been the source of panelists, speakers, conferees, or what have you, at county medical societies, A.M.A.-sponsored regional health insurance conferences, a national congress on pre-payment plans, the annual (national) meeting of the Health Insurance Council, before the North Carolina Insurance Adjusters' Association, the Association of Health Insurance Underwriters, sectional hospital administrators' conferences and meetings, and other similar groups.

Data, including comparable statistical material, has been collected in connection with an alleged area over-utilization and turned over to another committee of the Society for ultimate handling.

The waiting room pamphlet has been revised and mailed to the membership. Exhibit B of the North Carolina Health Insurance Advisory Board titled "Practices Not Deemed to Be In the Public Interest" was reproduced by Society Headquarters and mailed to the membership.

NORTH CAROLINA INSURANCE CLAIM REVIEW SERVICE — This offspring of the Liaison Committee began its formal function in 1963, and meets in conjunction with the joint committees each quarter. The rapid growth of major medical health insurance has made this function one that is now mandatory rather than purely desirable. The use of the terms "usual," "customary," "average," and "reasonable" in the policy language of this type contract with reference to reimbursable charges seems to be the area around which most submissions for review will revolve. The SERVICE (C.R.S.) is cognizant of the fine line which it must tread in this area. It is further aware that if this area is not handled, and handled well, that these questions will be resolved by the constituted courts of law. We are concerned about the resentment exhibited by some physicians when they are advised by an insuring company that a question has arisen as to whether a given fee is "usual and customary." The companies do not question the right of a physician to charge what he desires. They ask what is "usual and customary." When the physician elects not to present any extenuating circumstances, he does each of us a disfavor and puts the C.R.S. at a disadvantage in its review of a submitted case.

Further, it should be pointed out to the membership that company practices can be reviewed by this SERVICE. Medicine has not sent one single case up for review. We are fortunate in that the group in North Carolina has elected to make this Review Function a bilateral one in that, unlike other states and large counties, not only fees and certifications and charges are accepted for review, but that practices not in the public interest by carriers are subject to review.

The Service is sincerely concerned, after having reviewed some cases in North Carolina, that we in the profession are asking for some of the criticism that is being targeted to us. The Service is concerned in connection with the question of what is a "reasonable," what is a "usual," and what is a "customary" charge for service rendered. The Service is concerned as to whether the presence of major medical insurance is a criterion of the ability of a family to pay with complete disregard of their gross family income.

This report is being written by the Chairman of the Committee for Liaison to the Industry. He is aware of the honest and truly objective attitude of the members of the Committee. He is further aware of the possible criticisms that may be advanced as to the function of the Claim Review Service. He most sincerely wishes to extend an open invitation to any member of the Society to attend the deliberations of this group upon request and acceptance. This group of physicians is working for you. The ultimate aim is to avoid the interference of non-medical bodies in these areas of contention and to do it without punitive powers. We honestly, sincerely, and almost tearfully bespeak your assistance in this area. We who deal with these matters are unfortunately too cognizant of the problems that might be ahead of us all.

Frank W. Jones, M.D.
Chairman

BLUE SHIELD DEPUTATION COMMITTEE

This Committee has been relatively inactive during the past year inasmuch as no request for its services has been made. The Chairman, as ex-officio member of the Boards of Hospital Care and Hospital Saving Associations by virtue of the office of President-Elect of the Medical Society, has been apprised of any developments and kept the Committee informed.

The present status of action regarding a proposed merger between the two Associations has reached the point of appointing a joint committee representing each Board whose function it is to explore thoroughly, with the help of a management consultant if necessary, the feasibility of a merger, then to report their findings to each Board or a meeting of the combined Board if expedient.

Since the President-Elect has this year been made an ex-officio member of the Board of Hospital Care as well as Hospital Saving the Committee feels that he is in a key position to act as liaison between the Medical Society and the two Associations in this capacity, can replace the ad hoc Committee whose original purpose has been accomplished. The termination of this Committee is therefore recommended.

T. S. Raiford, M.D.
Chairman

COMMITTEE ON RELATIVE VALUE SCHEDULE

During the past year the Relative Value Schedule Committee has held one meeting, this meeting being held at the time of the General Committee Meetings of the Medical Society Meeting at Mid-Pines on September 28, 1963. At that time the decision was made with the approval of the Executive Committee to revise the Relative Value Schedule of the State of North Carolina to make it, with slight modifications, the same as the California Relative Value Schedule published in 1960. The Executive Committee and the Relative Value Schedule Committee were in agreement that these changes could only be brought about with the approval of the Subcommittee Groups in the State.

Since the Committee Meeting, efforts have been made to obtain approval from the various Sub-Specialty Groups. At the present time this task has not been completed.

Everett I. Bugg, Jr., M.D.
Chairman

COMMITTEE LIAISON TO N. C. PHARMACY ASSOCIATION

The Committee Liaison to North Carolina Pharmacy Association held its regular meeting at Mid Pines on September 26, 1963. Present were James P. Hendrix, M.D., Chairman; Ralph G. Templeton, M.D., James T. Barnes, and W. N. Hilliard. The Committee reviewed the minutes of the meeting of 1962, and was fortunate in having present for additional explanation, Dr. Ed Beddingfield, the former chairman. Several matters of Committee interest and business was discussed. It was proposed that the joint meeting of the Committee, with similar Committee representing the North Carolina Pharmacy Association be held, at an appropriate date.

However, it was learned that a meeting on the national level was to be held under the sponsorship of the American Medical Association, so action on matters discussed by the Committee was deferred, pending this meeting and the receipt of such guidance in matters of policy as might be derived from the meeting at the national level.

This meeting was delayed longer than anticipated, but the Congress on Pharmacy and Medicine was held in Chicago on March 11, 1964. The Congress was attended by Dr. John T. Dees of Burgaw, a member of this Committee, and representative of the State Society. The Congress also was addressed by Dr. Beddingfield, a member of our Society. Report of the activities of the Congress is to be presented to this Committee by Dr. Dees for study and appropriate action.

However, pending further activity, and at the time of the preparation of this report, the Committee does not have any specific recommendations to submit to the Society.

James P. Hendrix, M.D.
Chairman

ADVISORY COMMITTEE TO NORTH CAROLINA MOTOR VEHICLES ON TRAFFIC SAFETY

The Committee on Highway Safety has consulted with the Department of Motor Vehicles of the State of North Carolina and has reviewed the programs on Highway Safety as presently being carried out in Florida, Pennsylvania and New Jersey. Following a review of these programs, a proposal was made to the Executive Committee at the fall meeting in Pinehurst and the outline of this program was approved by the Executive Council of the State Society.

During the past several months, we have set up six groups, each consisting of five physicians, a total of thirty physicians, who are unidentified and who will act as Medical Consultants to the Licensing Division of the Department of Motor Vehicles. Three dinner meetings have been held and the program discussed in detail by members of the Traffic Advisory Committee along with representatives from the Department of Motor Vehicles.

At the time of this report, we are presently in the process of sending to each physician in the state an explanatory letter of how the program works and a sample copy of the examination form. We are also sending a copy of the "AMA Guidelines for Determining Physical Fitness to Drive an Automobile" which will be used as a basis for the opinions of the consulting physicians. All data obtained from these physicians will be recorded and analyzed in detail so that this committee can review its activities and make such recommendations to the Department of Motor Vehicles and also the Legislature when necessary to improve the safety of the highways in North Carolina.

Your Chairman is deeply indebted to Dr. John Morris, Major Charles Speed, Mr. Elton Peele and Mr. Edward Wade for their yeoman work and support in getting this program underway.

Simmons I. Patrick, M.D.
Chairman

COMMITTEE ON VENEREAL DISEASE

The Board consisting of:

Howard Paul Steiger, M.D., Chairman, 1600 E. 5th St., Charlotte

Sherwood W. Barefoot, M.D., 1030 Professional Village, Greensboro

Jacob Koomen, M.D., State Board of Health, Raleigh

Charles M. Norfleet, M.D., Bowman Gray, Winston-Salem

Charles H. Peete, Jr., M.D., Duke Hospital, Durham

Hamilton W. Stevens, Jr., M.D., 90 Grovewood, Asheville

Donald L. Whitener, M.D., 2240 Cloverdale Ave., Winston-Salem.

Is glad to report a decrease in the total incidence of syphilis from 4,793 in 1962 to 3,806 in 1963. The increase in infectious syphilis from 839 in 1962 to 986 in 1963 apparently reflects accelerated case finding activity.

Due to the nationwide increase in venereal disease we feel certain measures should be adopted:

1. Taking a routine blood test on all hospital cases.

2. Physicians should take advantage of the excellent resources of interviewing and epidemiology

CASES OF SYPHILIS AND GONORRHEA IN NORTH CAROLINA WITH RATES PER 100,000 1940 AND 1950 - 1963

Calendar Year	Total Syphilis	Rate	Number Primary & Secondary	Rate	Number Early Latent	Rate	Number Late & Late Latent	Rate	Number Congenital	Rate	Number Gonorrhea	Rate
1940	21,225	594.3	2,611	73.1	9,436	264.2	8,143	228.0	1,035	29.0	4,616	129.2
1950	5,146	126.7	1,187	29.2	2,457	60.5	1,170	28.8	332	8.2	14,930	367.6
1951	4,080	99.0	744	18.0	1,804	43.8	1,114	27.0	418	10.1	15,779	382.7
1952	3,709	88.9	436	10.4	1,464	35.1	1,458	34.9	351	8.4	15,895	381.0
1953	3,682	87.2	417	9.9	1,178	27.9	1,742	41.3	345	8.2	15,958	378.0
1954	3,353	78.5	347	8.1	1,068	25.0	1,705	39.9	233	5.5	14,947	350.0
1955	3,512	81.3	244	5.6	1,007	23.3	2,032	47.0	229	5.3	12,731	294.7
1956	4,107	94.0	225	5.2	857	19.6	2,764	63.3	261	6.0	12,728	291.4
1957	5,219	118.1	192	4.3	916	20.7	3,811	86.3	300	6.8	14,055	318.2
1958	4,298	96.2	251	5.6	750	16.8	3,100	69.4	197	4.4	12,125	271.5
1959	4,273	94.6	207	4.6	728	16.1	3,087	68.4	251	5.6	10,816	239.5
1960	2,912	63.9	466	10.2	612	13.4	1,712	37.5	122	2.7	10,006	219.5
1961	3,410	74.8	606	13.3	677	14.8	1,964	43.1	163	3.5	9,029	198.1
1962	4,793	103.0	839	18.0	663	14.2	2,445	52.5	160	3.4	8,588	184.5
1963	3,086	80.7	968	20.5	469	9.9	1,765	37.4	117	2.5	9,185	194.7

Gonorrhea includes opthalmia neonatorum

Source: Public Health Statistics Section - Annual Report

CASES AND RATES PER 100,000 POPULATION OF VENEREAL DISEASE BY AGE GROUPS
(1956 - 1963)
NORTH CAROLINA

	Calendar Year	15-19 Years of Age Number of Cases	Rate	20-24 Years of Age Number of Cases	Rate	All Ages Number of Cases	Rate
				Primary and Secondary Syphilis			
Thru 1963	1956	49	12.5	78	23.4	225	5.2
	1957	45	11.4	59	17.9	192	4.4
	1958	70	17.5	64	19.7	251	5.6
	1959	63	15.6	60	18.7	207	4.6
	1960	131	32.1	148	46.6	466	10.2
	1961	147	35.6	188	59.9	606	13.2
	1962	237	56.9	263	84.8	841	18.0
	1963	219	51.9	309	94.0	968	20.5
				Gonorrhea			
	1956	3,181	813.8	4,518	1358.2	12,728	292.0
	1957	3,953	1000.3	5,114	1554.9	14,055	318.9
	1958	3,463	866.8	4,272	1313.9	12,125	272.0
	1959	2,713	671.8	3,372	1049.3	10,816	240.0
Thru	1960	2,880	705.7	3,575	1125.6	10,006	219.6
	1961	2,532	613.9	3,296	1050.2	9,029	196.0
	1962	2,478	594.6	3,127	1008.4	8,588	184.5
				Total Infectious VD			
1962	1956	3,230	826.3	4,596	1381.6	12,953	297.2
	1957	3,998	1011.7	5,173	1572.8	14,247	323.2
	1958	3,533	884.3	4,336	1333.6	12,376	277.7
Only	1959	2,776	687.4	3,432	1068.0	11,023	244.6
	1960	3,011	737.8	3,723	1172.2	10,472	229.8
	1961	2,532	613.9	3,484	1110.1	9,635	209.2
	1962	2,715	651.5	3,390	1093.2	9,429	202.5

1963 Primary and secondary syphilis below the age of 15 years = 25 cases.
Poulation N. C. 1963 4,716,780

provided by the various health departments.

3. A sincere effort on the part of all physicians should be made in reporting venereal disease cases promptly.

4. The high incidence of syphilis transmitted by male sexual deviation should be emphasized.

It is hoped that in 1964 the incidence of all venereal diseases in North Carolina will show an actual decrease with further evidence to indicate our reporting has improved.

Howard Paul Steiger, M.D.
Chairman

COMMITTEE ON HEALTH CAREERS

The Committee on Health Careers for the Medical Society of the State of North Carolina met at the annual committee meetings in Mid Pines in September 1963. At that time, the Committee discussed the part that the State Medical Society was taking in health careers in North Carolina as the Medical Society was financially involved at the rate of five hundred ($500) dollars for three years. The committee members felt that was the main function of the Committee on Health Careers, outlined by our President in 1962, and, in view of this, the committee unanimously approved a recommendation to the President that the Committee on Health Careers be abolished. The feeling of the Committee was that a great majority of this career work would be done at a local level in the County Medical Societies in cooperation with local school authorities and the Health Careers of North Carolina.

Frederick H. Taylor, M.D.
Chairman

COMMITTEE ON ASSOCIATION OF PROFESSIONS

The North Carolina Association of Professions was officially organized in January, 1963. Four state professional groups made up the Charter Membership: Medical Society of the State of North Carolina; Professional Engineers of North Carolina; North Carolina Chapter, The American Institute of Architects; and the North Carolina Veterinary Medical Association.

Officers elected for 1963 were: President, T. C. Cooke, P.E., Durham, North Carolina; Vice President, Jacob Shuford, M.D., Hickory, North Carolina; Secretary, William W. Dodge, III, A.I.A., Raleigh, North Carolina; and Treasurer, Earl L. Knox, D.V.M., Raleigh, North Carolina. Officers were elected to serve until the first annual meeting in 1964.

It was agreed by the Constitution and By-laws of the organization when chartered that each member organization would have equal representation

and voting power on the Board of Directors. It was decided that six representatives from each group would comprise the membership of the Board.

Board meetings have been held quarterly with Executive Committee meetings held upon call of the President.

Committees have been established to study and execute plans for: Education, Legislative Information, Constitution and By-laws, Business Services and Techniques, and Public Relations. Members of the Board of Directors serve on these committees.

Programs:

At each quarterly Board Meeting, invited guest speakers have been asked to give pertinent information that has been of interest to all member groups. Senator John Jordan of Wake County was our first speaker. He discussed legislation introduced in the 1963 General Assembly that was of particular interest to the professional groups. He encouraged professional persons to take more interest in local, state, and national politics and to be informed on important issues.

Dr. Martin Black, Professor of Accounting, Duke University, was the second speaker. He outlined the prerequisites of a professional group and the criteria which made it possible to be called a professional group or body. At the time he addressed the Board of Directors, there were rumors of new tax laws that would definitely have effect on the professional person. Many of these proved to be false alarms but some proved to be true. His talk was a timely subject, and the points he brought out still have meaning as to record keeping for the professional worker.

In October, 1963, V. K. Hart, M.D., of Charlotte was the invited speaker. The Board met in Burlington, North Carolina, at the Holiday Inn. Dr. Hart's major emphasis was "The Importance of Pooling Professional Offense and Defense in the Face of Ever-Increasing State Socialism." His talk was well received and stimulated a great deal of discussion following his talk.

There will be two distinguished guests invited to address the First Annual Meeting of the Association of Professions scheduled to be held on Saturday, March 4, 1964, in Burlington, North Carolina. U. S. Senator B. Everett Jordan will address the luncheon session, and Hugh W. Brennemen, Executive Director of the Michigan Association of Professions, will speak at the morning General Session. Mr. Brenneman will speak more to the organization and programming of the Michigan Association and its efforts to gain membership. Senator Jordan will concentrate on the need for Professional participation in local and state political efforts.

Membership:

Major attention has been given the past few months to Membership of the Association. An effort has been made to interest the lawyers, dentists, and pharmacists into becoming members, either as a state organization or as individual members. There seem to be more agreement for individual membership than for limited state participation. This matter will be discussed further at the Annual Meeting when Mr. Brenneman can give some guidance by their experience in Michigan. Michigan began with state organization membership like North Carolina but has since gone to Individual Memberships. The growth of the Michigan Association has sky-rocketed once individual memberships were announced and approved.

In an effort to acquaint more professional persons with the organization, the Association has published an Informational Leaflet which is available upon request. This outlines the purposes, membership, organizational structure, and states the identity of the state-wide organization. It is hoped that every physician will take time to read this leaflet. Copies have been distributed to all member physicians of the State Medical Society with the February mailing of the Public Relations Bulletin.

Future Plans:

Hopefully there will be presented at the Annual Meeting a plan for individual Memberships. If accepted, a campaign will be conducted in each county of the state by existing members of state organizations. The campaign will not be conducted through any state office, but by personal contact at the local level. Example: a physician will be asking veterinarians, lawyers, dentists, engineers, architects, etc., to join the county or area group. This might be anyone of the professional persons calling on other professional workers in any given county or area for Membership. A $5.00 annual membership fee has been approved by the Executive Committee.

The Committees have been getting organized this year and their areas of work mapped out. In 1964, we expect these Committees to become more active.

The plan for invited speakers for quarterly Board Meetings will be continued. Annual meeting plans will be set for early 1965.

The major purpose of the Association of Professions will continue to provide a "forum" and organizational machinery whereby the combined strength and counsel of all professionals can be utilized for the advancement of professional ideas and the promotion of professional leadership.

The close relationships between members of the professions brings into focus a better understanding and appreciation of one another, so that the best of the professional training, standards of practice, and service to the public can be maintained and upheld for future practitioners.

John R. Kernodle, M.D.
Chairman

COMMITTEE ADVISORY TO MARRIAGE COUNSELING

Based on some study efforts of the Chairman of the Advisory Committee to Marriage Counseling has conferred by telephone conferences regarding some logical obstacles which have arisen in connection with progress in this field of consideration, hence the report is that the Committee has done a great bit of research work, has done a great bit of conferring with the Departments of Phychitary at the University of North Carolina and at Duke University and with a great many of the medical people in the Departments of Psychiatry, Ob-Gyn and General Practice in the teaching institutions in the State, and it is felt that it is wise at this time to delay the creation of a definitive program until the new Chairman of the Department of Psychitary at the University of North Carolina assumes his official position at that Instituion.

This is a new work. It should be well-planned, well organized with strong backing certainly from the psychiatrists, the Ob-Gyn people and the General Practitioner in this State. The General Practitioners and the Ob-Gyn people will be the first people to see the people who are in need of pre-marital education and marital counseling. These are the people that should be familiar with the problems and have some training in the handling of these people and problems, particularly in recognizing these problems in order that they may be properly referred.

The Committee proposes further consideration and efforts during the new activity year in more concise planning with the University of North Carolina Department of Psychiatry and will endeavor to have a substantial progress report for the Fall Conclave of Committees.

Rachel D. Davis, M.D.
Chairman

COMMITTEE ADVISORY TO N. C. ASSOCIATION OF MEDICAL ASSISTANTS

The North Carolina Association of Medical Assistants held its organizational meeting in April of 1963. At that meeting the Constitution and Bylaws were adopted and temporary officers elected. The group was honored to have present at that meeting Mrs. Elizabeth Margulis, representing the A.M.A.; Mrs. Dorothy Hartel, representing the A.A.M.A.; and Mr. William Hilliard, representing the Medical Society of the State of North Carolina.

The first meeting of the Association was held on August 4, 1963, at which time officers for the first year were elected, and delegates selected to represent the Chapter at the annual meeting of the American Association of Medical Assistants in Miami, Florida. Three voting delegates and two alternates were selected.

The Chapter was accepted into the national organization on July 8, 1963, and received the State Charter at the national meeting in Miami.

At the Executive Committee meeting on January 25, 1964, seven new advisors were appointed, and plans were formulated for the first annual meeting to be held in Concord, North Carolina, April 4, 1964. The new advisors are: Dr. Edwin M. Tomlin, Concord; Dr. Donald B. Koonce, Wilmington; Dr. George W. Liles, Kannapolis; Dr. Abe L. Feuer, Gastonia; Dr. George R. Miller, Gastonia; Dr. David G. Welton, Charlotte; and Mr. William Hilliard, Raleigh.

During the coming year, the North Carolina Chapter hopes to establish an educational program for its members, and the eventual certification of all members, so that they may be better able to serve their employers and the medical profession as a whole. A membership drive is also planned with the hope that new local chapters can be established throughout the State.

The North Carolina Chapter wishes to thank the Medical Society of the State of North Carolina for its help and encouragement during the past year, and looks forward to being of service to its members whenever possible.

John A. Brabson, M.D.
Committee Advisory to N. C.
Association of Medical
Assistants

THE RETIREMENT SAVINGS PLAN COMMITTEE

As reported to the membership in October 1963 there has been a delay in opening the North Carolina Medical Retirement Savings Plan because the Securities and Exchange Commission has insisted that bank trustees must register certain pooled investment funds. This requirement could cost a fund from $25,000 to $70,000 initially. It is the opinion of the proponents of the legislation to aid the self-employed individuals in setting up retirement programs that it was the intent of Congress to allow such pooling of investments funds when it enacted the Self-employed Individuals Tax Act of 1962. However, the SEC has not conceded this and indicates it will bring suit against any bank that offers such services. It is expected that action by Congress may be necessary to clarify the situation.

The First National City Bank of New York, one of the largest in the country, has offered since December 1963, what it calls an "Approved Retirement Plan" under the so-called Smathers-Keogh Act. It is understood that this bank expects to have a showdown with the SEC on this matter and is representing the banking industry in the test.

On the other hand the National Bank of Detroit has applied for and has received permission from the SEC for a similar plan.

In October 1963, Representative Keogh intro-

duced in Congress amendments which sought to make changes in the present Keogh law. These changes would remove the 50% limitation on the tax deduction and would also remove the percentage in dollar limitations for the self-employed with participating employees. The present limitations would remain for retirement plans for physicians without employees.

From time to time over the years the Retirement Savings Plan Committee has been urged to begin operation of our plan prior to final legal approval. The Committee has resisted these moves. In 1961 the Colorado Medical Society did begin operation of a plan somewhat similar to ours as did the Florida Medical Association and one or two other state societies. When the Colorado Plan was advertised regionally it attracted the attention of the SEC which ruled that the Colorado Plan was similar to a public offering and should be made a regulated investment company. Consequently, the sponsors of the Colorado Plan were faced with costs ranging between $75,000 and $100,000 to properly comply with regulations of the SEC.

In 1962 the Committee was asked to look into the advisability of the incorporation of the practice of medicine for tax purposes. The matter was thoroughly explored and possibilities created. The Committee did not find evidence that the benefits from the incorporation of medical practice, either by an individual or an association, as a vehicle to obtain tax deferred retirement benefits, were sufficient to justify the costs and inconveniences involved and, consequently, did not make a recommendation to support this legislation. As most are aware this "Kintner type" of corporate structure was recently ruled invalid by the Internal Revenue Service.

Throughout the years of working on a retirement savings program the Committee has held that unless it were able to sponsor a service of real value and something better than our members could otherwise obtain then it would not support a program for our Society. In other words, if this Committee could only devise a plan similar to some of the other plans which are available there would be very little justification in sponsoring such a plan.

Realizing that many institutions would offer quality services at varying prices, the Committee sought and obtained by competitive bids a large banking institution in North Carolina to service and manage The North Carolina Medical Retirement Savings Plan.

The North Carolina Medical Retirement Savings Plan will be one in which a physician may make deposits of partially pre-taxed funds with the Wachovia Bank and Trust Company at intervals throughout the year and designate percentages of these deposits to be placed in the Stock Trust Fund, handled by Wachovia, and in the Annuity Program handled by the Minnesota Mutual Life Insurance Company. The percentage of contributions to either or each may vary.

The Committee has formulated a proposed agreement with Wachovia which includes the collection of all funds. Those funds for annuity purchases would be transferred to Minnesota Mutual. Minnesota Mutual will compensate Wachovia for collecting the funds going into the annuity portion of the program. Our agreement provides for compensation to Wachovia out of the stock trust fund on a monthly basis as follows:

1/24th of 1% of the market value of the total fund as of such date on the first $1,000,000 (rate ½ of 1% per year).

1/36 the of 1% of the market value of the total fund as of such date on the next $4,000,000 (rate ⅓ of 1% per year).

1/48th of 1% of the market value of the total fund as of such date on the next $5,000,000 (rate ¼ of 1% per year).

1/120th of 1% of the market value of the total fund as of such date on all over $10,000,000 (rate 1/10 of 1% per year).

No other charges shall be made by the Trustee to the fund except brokerage fees, counsel fees, taxes, postage and insurance and other expenses ordinarily chargeable to the trust by a Trustee.

Most physicians know about the American Medical Association Members Retirement Plan. The trustee of this plan is the Harris Trust & Savings Bank of Chicago which received its appointment as a result of competitive bids. For the first year or so of operation this bank will make a small charge for each check used to deposit money in the trust fund. Other compensation has been arranged on a sliding scale. Also, Scudder, Stevens & Clark, Inc., is to act as investment advisor. The fee for investment advisory services is to be calculated on a percentage of the market value of the funds under supervision. In the Prospectus of the AMA plan there is a statement that the estimated fees of the Trustee, the AMA, and the investment counselor would total annually between ¼ and ½ of 1% of the accumulative contributions under the retirement plan and would be allocated equitably among the participants. There was a cost of approximately $70,000 incurred in registering with the Securities and Exchange Commission, paying legal counsel and in the preparation and printing of the Prospectus and other items connected with initiating the AMA plan. It is expected that these costs will come out of income of all the retirement trusts over a period of at least five years.

Members of the Society who are now in a position to participate in programs provided by the Keogh law and who have been waiting to participate in the North Carolina Medical Retirement Savings Plan may be temporarily interested in the Bond Purchase Plan of the Treasury Department. Information concerning this plan may be obtained from any bank. It is understood that self-employed pension plans may be amended and changed from

time to time this would allow members to participate in the North Carolina Medical Retirement Savings Plan at a later date if desired.

Jesse Caldwell, M.D.
Chairman

AD HOC COMMITTEE TO REVIEW PLANS FOR INDUSTRIAL EDUCATION CENTERS

During the 1963 General Assembly, legislation was introduced providing for the establishment of training as laboratory technicians within the framework of the State sponsored Industrial Education Centers. This legislative proposal evoked a storm of comment both favorable and unfavorable from the Society membership. On the one hand, there were many physicians who realized that there is an acute shortage of para-medical personnel, especially laboratory technicians and technologists, and on the other hand there was a group of our physicians headed by our pathologist who were very much opposed to the state embarking on a plan which could result in the production of poorly trained, inferior laboratory personnel. The North Carolina Association of Medical Technologists were likewise opposed to the measure as presented to the General Assembly. Because of this diversity of opinion from within the profession, the Society took no stand on the legislative proposal and the Bill never received Committee consideration. The legislative sponsor of the Bill, Senator James, learned during the course of the consideration of this Bill that some such plan might be worked out that would overcome the objections presented without having to have new enabling legislation. It appeared following the adjournment of the Legislature that continued consideration was being given by the Department of Public Instruction for the establishment of some such areas of training and at the suggestion of the Committee on Legislation, the Executive Council directed the President to appoint an Ac Hoc Committee to review this problem and to submit a report to the Executive Council and to the House of Delegates recommending a policy which should be supported by the Society regarding the training of this type of personnel.

President Rhodes appointed a Committee composed of the undersigned as Chairman, along with Dr. Mark Lindsey and Dr. Tom Wilson. We have been in close communication with the North Carolina Society of Medical Technologists and we have also personally visited Dr. Valentine at the North Carolina State Department of Public Instruction. Dr. Valentine is in charge of the Industrial Education Centers throughout the State. We have learned that there is no state certification or licensure for laboratory personnel. There are basically three levels of laboratory personnel presently employed in the state: (1) Technologists certified by the American Society of Clinical Pathologists. These medical technologists are the most highly trained group and the requirements for ASCP certification include graduation from an ASCP certified school which includes a college degree. (2) The Medical Technician group—This group is a lesser trained group who have graduated from high school and from a course of varying length of training but not of college level degree training during which didactic and theoretical instruction in laboratory work is given. Most of these schools do not have any clinical affiliation with hospitals and all clinical and practical training is accomplished following the period of academic training in the school. (3) Laboratory personnel with no formal training except that gained by apprenticeship type, on the job training. It is the belief of the Committee that there is a shortage of adequately trained laboratory personnel in the State of North Carolina. It is the further belief of the Committee that although efforts should be made to increase the number of laboratory personnel this should not be done at the sacrifice of quality of training. We find that the apparent reason for a shortage in the most highly trained ASCP group of technologists are (1) relatively low pay, (2) relatively long hours of work, (3) a relatively lengthy period of training, (4) a relatively expensive period of training and (5) a lack of "status" sensed by some technologists. At the present time there are 12 schools certified for ASCP training in North Carolina with a total potential enrollment of 112 students. However, there are 48 vacancies within these schools at this time. The program of health careers plus the ASCP groups on a recruitment program is helping somewhat to fill these existing vacancies.

However, it is apparent that even if all these vacancies were filled there would still remain a serious shortage of laboratory personnel. This has been recognized nationally and we now learn that the American Society of Clinical Pathologists has created a new category of laboratory personnel: the Certified Laboratory Assistant. A definite standard for the training of such laboratory assistance has been established with curriculum description and other minimum standards laid down. This program has the endorsement of the North Carolina Society of Medical Technologists. The State Department of Public Instruction is sponsoring a pilot program in this certified laboratory assistant program in cooperation with the Wake County Memorial Hospital in Raleigh, North Carolina. The Department of Public Instruction and the Medical Society will watch with keen interest this pilot program which has just gotten underway and which provides for a two-year period of instruction and includes both academic, classroom, theoretical training as well as clinical training within the hospital walls. The program is directed by the hospital pathologists. The Industrial Education Department of the Department of Public Instruction provided the necessary laboratory and classroom equipment for this pilot program. While it is realized that the gradu-

ates of this program will not be comparable in technical knowledge and proficiency to the college degree technologists certified by ASCP, it is believed that these certified laboratory assistants will be superior to the present level of medical technicians and completely untrained laboratory personnel and that they can serve a very useful purpose in many laboratories working wherever possible under an ASCP certified technologist.

The Committee also learned that for many years the Medical Care Commission has provided some scholarship assistance to medical technologists during the fourth and final year of their training. The Association of Technologists recommends and the Committee agrees with their recommendation that this scholarship assistance for the recruitment of technologists be increased and that they be made available at the beginning of the training period rather than withholding all the help until the final year.

In summary, the Ad Hoc Committee agrees that there is a shortage of laboratory personnel in North Carolina and that steps should be taken to correct this shortage. We recommend that the Society continue to scrutinize closely any new program of training laboratory personnel with particular interest on any short term training. We recomment that the Medical Society should help to educate its members as to the various levels and potentialities of various levels of laboratory personnel. We recommend that it should be the policy of the Society for the time being to endorse the pilot project underway for the training of certified laboratory assistants at the Wake Memorial Hospital under the co-sponsorship of the State Department of Public Instruction, and that particularly close attention be given to the possibility of setting up such a training program in other areas. The Committee recommends that if this program is expanded that it always remain within the walls of the hospital and that the program remain under the direction of a physician, preferably always a pathologist.

Mark Lindsey, M.D.
Tom Wilson, M.D.
E. T. Beddingfield, Jr., M.D.
Chairman

ADVISORY COUNCIL TO N. C. LICENSED PRACTICAL NURSES ASSOCIATION

(Report not received at press time.)

COMMITTEE ON RADIATION

The Committee on Radiation of the State Medical Society has had very little to do this year after the passage of Public Law Bill HR-34 and also the State Health Department's program of handling isotopes. The radiation problem seems to be well under way and eventual close surveillance of radiation is coming about.

Robert J. Reeves, M.D.
Chairman

NORTH CAROLINA BOARD OF MEDICAL EXAMINERS

STATISTICS

November 1, 1962 - October 31, 1963

Total number applicants granted license		392
By written examination	225	
By endorsement of credentials	166	
Limited license		98
Hospital residents	81	
County or counties	14	
State institutions		
Limited license converted to full license		26
Special limited license		79
Hospital residents	53	
Postgraduate foreign exchange residents	25	
Staff state institution	1	
Written Examination Failure		8
Part I	1	
Part II	7	
Applicants rejected license by endorsement of credentials		1
Failed to meet requirements of the Board		
Applicants declined permission to take written examination		0
Hearings		17
Violation narcotic law	1	
Criminal abortion and unprofessional conduct	2	
Violation terms and conditions of suspended sentence	1	
Surveillance as to narcotic addiction	5	
Delegation regard license of foreign medical graduate	1	
Petition for recommendation of reinstatement of narcotic stamp	4	
Alleged misrepresentation as to insurance claims	1	
Alleged unprofessional conduct	1	
Revocation medical license another state, suspended sentence	1	
Investigation State Bureau of Investigation		3
Narcotic addiction	2	
Violation narcotic law	1	
License to practice medicine revoked		3
Violation terms and conditions of suspension of previous judgment, dishonorable conduct	1	
Unprofessional conduct	1	
Violation terms and conditions of suspension of previous judgment, narcotic addiction	1	
Narcotic tax stamp surrendered		2
Narcotic addiction		
License to practice medicine reinstated		0
Recommendation to restore narcotic tax stamp		3
Declined to recommend reinstatement of narcotic tax stamp		2

rash were usually present, indicating a sensitivity reaction. In the 2 cases of neutropenia, the granulocytes almost disappeared, but on discontinuation of the drug the cell count returned to normal.

After the initial administration the appearance of systemic effects such as fever with or without a rash generally indicates the development of what may be termed a toxic reaction. However, this does not mean necessarily that the patient has acquired permanent sensitivity to the drug. In this study 60 febrile reactions were encountered, for an incidence of 1.2%. Twenty-five of these patients had accompanying rashes either while the temperature was rising or shortly afterward. Skin eruptions occurring in the absence of fever never proved to be of drug origin. Scarlatiniform or measles-like eruptions were most common. Diffuse redness of the pharynx often accompanied the rash and caused sore throat or difficulty in swallowing. Leukocytosis, with counts as high as 70,000 and more than 90% polymorphonuclear cells, was not unusual during the febrile episodes. In all instances, the counts returned to normal after the drug was discontinued. Only one case of a toxic reaction resulting from application of a local drug was found in this series, despite frequent use of the drug for many types of skin infections.

Regarding repeated administration of sulfonamides, Fink and Wilson[6] observed little evidence of increased incidence of reactions in children during a second or subsequent course of the drug. Although several investigations have failed to confirm this finding, the majority of the authors agree that a second course of the drug does not result in increased hypersensitivity.

The material reported by Fink and Smith[5] does not indicate that the uncomplicated administration of a sulfonamide drug sensitizes the patient to subsequent doses of the drug. However, patients who have once manifested a febrile reaction to a drug are likely to have become sensitive to that drug and may react with fever and rash to its re-administration. During the 2½ years covered by the study, every patient who gave this immediate type of reaction had previously shown a febrile reaction to the same drug. If a complete history fails to disclose an earlier febrile reaction, a child cannot be considered sensitized and subsequent courses can be given without fear of an immediate reaction.

Test doses of sulfonamides were given to 34 children who had shown elevated temperatures following initial courses. Of the 21 children who had manifested fever and rash originally, only 7 did not react to the test doses. All the remaining 14 children developed both fever and rash within 48 hours.

Test doses of different sulfonamide drugs were given in 9 instances to 7 children. Five of the children reacted to test doses of sulfathiazole. Two had reactions. One of these was given sulfamerazine and the other sulfapyridine, without reaction in either case. Two children reacting to sulfathiazole did not show any untoward effect from the administration of sulfadiazine. It is not definitely known how much cross-sensitization can occur, but apparently a different sulfonamide is less likely to produce a reaction in sensitized children than the original drug.

Most deaths from sulfonamide therapy are caused by renal reactions, but a majority also involve toxic febrile reactions. The predominant findings in all cases reviewed was the presence of areas of focal necrosis in the kidney as well as the liver, spleen, lungs, brain and heart, indicating widespread damage. Rich[17,18] has demonstrated that the areas of necrosis are the result of periarteritis-nodosa-like lesions which he believed were manifestations of sensitivity.

The untoward reactions to sulfonamide agents are infrequent in children and infants and rarely cause serious effects. Since the danger of severe reaction to subsequent doses of sulfonamides exists only when a febrile reaction has occurred previously, there is apparently no more reason to fear harmful effects from multiple courses of drug therapy than from the first course. Because of the low incidence of toxic reactions, sulfonamides may safely be administered to children and infants when indicated[1].

Chloramphenicol

Chloramphenicol has caused a few allergic reactions. Aplastic anemia and the "gray syndrome" in premature infants are consid-

ered to be toxic rather than allergic reactions. Although bone-marrow damage is the major toxic effect, there are several minor untoward effects—skin rash, gastrointestinal disturbances, and glossitis[7].

Streptomycin, isoniazid and para-amino salicylic acid

Streptomycin produces skin disturbances primarily. Fever is the most common systemic reaction. Of the toxic reactions to streptomycin, damage to the eighth cranial nerve, manifested by vestibular disturbances and auditory impairment, is the most important. Anaphylaxis is a rare complication.

Isoniazid rarely causes a reaction. In the adult the most common are peripheral neuropathy, while in children seizures may result from an overdose. It is thought that toxicity to isoniazid results from pyridoxine deficiency, because of the large demonstrable excretion of pyridoxine[3].

The chief toxic reactions to para-amino salicylic acid are gastrointestinal, and may produce anorexia, nausea, vomiting, and diarrhea. Pruritic dermatitis and drug fever are seen occasionally. When large doses are given to children, there is a slight possibility that acidosis may develop[7].

Novobiocin

Novobiocin is a significant antigen, causing a maculopapular rash in about 12.5% of patients treated for ten days or more[1].

Tetracycline

The tetracyclines produce few allergic reactions, severe dermatitis being produced occasionally. When administered parenterally, these drugs are potentially as allergenic as penicillin. In a series reported by Berkowitz, Glaser, and Johnstone[1], oxytetracycline was given to 112 children, of whom 88 were known to be allergic. Allergic reactions occurred in 3 of the allergic children (3.4%) and in none of the non-allergic. The allergic reactions were angioedema, a generalized morbilliform eruption, erythema and desquamation in one child each. "Side reactions" were gastrointestinal distress, nausea, vomiting and diarrhea, and occurred in 10.2% of the allergic children. This antibiotic, unlike penicillin, caused side reactions in non-allergic children (8.3%), giving a total overall incidence for this group of 9.8%.

In another study by these authors[1], chlortetracycline was given to 208 children, of whom 168 were allergic. Seven (3.7%) had allergic reactions consisting of maculopapular eruptions in 3, urticaria in 3, and aggravation of a previously existing topic dermatitis in 1. No reactions occurred in the non-allergic children. The overall incidence for the whole series was 3.3%. Side reactions occurred in 17.2% of the allergic children and in none of the non-allergic group. The overall incidence of side reaction was 14%.

Bacitracin

The major toxic effect of systematically administered bacitracin is renal tubular damage; however, these effects are usually reversible. There have been no reports of toxicity following oral and topical administration.

Neomycin

Parenteral injections of neomycin may cause serious renal injury manifested by albumin and casts with an elevation of the nonprotein nitrogen. Damage may also be caused to the eighth cranial nerve. Therefore parenteral injection is generally contradicated.

Tyrothricin

The toxicity of tyrothricin prevents its parenteral administration. This is a potent hemolytic agent, and must not be administered by any route which might permit it to come in contact with the blood stream[4].

Polymyxin B

Hypersensitivity reactions either do not not occur or are very rare in association with polymyxin B. Parenteral injection however may damage the kidneys by producing glomerular and tubular changes. Oral and topical reactions are clinically insignificant.

Erythromycin

Untoward reactions are uncommon and usually of little consequence. Occasionally drug fever may be produced by erythromycin.

Days Paid	689,459	657,524
Average Stay	6.66	6.54
Average Payment Per Case	151.26	140.90
Admissions Per 1,000 Per Year	157	156
National Blue Cross Per 1,000 Per Year	144	142
*Includes Subscriber Participants in Administered Accounts Numbering	75,125	68,703

One of the highlights of this year's report is the payment of nearly 25 million dollars to North Carolina doctors and hospitals in a single year. This is one thousand times the 25 thousand dollars granted by Duke Endowment to found Hospital Saving Association in 1935. The figures show that 1963 was a satisfactory year in all respects. We are especially gratified by the net gain of 41,619 participants to a total of 698,394, making the Plan one of the leaders in growth.

In early 1963 the Medical Society's Blue Shield Committee, under the Chairmanship of Dr. W. Z. Bradford, formulated a new High Option Program of professional benefits covering surgery, obstetrics, anesthesia, inpatient medical care (including provisions for intensive care and consultation), outpatient diagnostic and therapeutic radiation, and pathology. This $4,000 individual and $6,000 family income limit program was approved by the House of Delegates in May and subsequently cleared with the North Carolina Insurance Department and announced to physicians and the public for sale effective November 1, 1964. This provides a modern and comprehensive program which meets national account needs and gives progressive North Carolina businesses and individuals an opportunity to prepay medical costs on a very adequate basis. The Association is grateful to the medical profession for this advancement.

As in previous years, good progress was made in upgrading levels of coverage and in adding benefits for office and outpatient services. Because North Carolina is such a varied state with an overall low per capita income, it is nescessary to provide a variety of coverages, sometimes starting with minimum coverage and improving periodically as economic progress permits.

Length of hospital stay and incidence of admission varied little from the previous year. New and faster computer statistical methods will enable the Association to pinpoint unusual situations quickly and the Association expects to alert hospital staffs and county societies if studies show local experience that will have a markedly significant effect on costs.

The Professional Relations Department, under Mr. K. G. Beeston's direction, has conducted a number of workshops for doctors' assistants, and this educational aid will be continued.

President John S. Rhodes, a past member of the Board and the Blue Shield Committee, has supported the cause of voluntary prepayment in an outstanding manner, and the day-to-day aid and counsel of Mr. James T. Barnes was as invaluable as ever.

E. McG. Hedgpeth, M.D.
Medical Director
Hospital Saving Association

REPORT FROM THE HOSPITAL CARE ASSOCIATION TO THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA

The attainment of two major milestones made 1963 a significant year for Hospital Care Association. The Association celebrated its 30th Anniversary on August 5 and reached the $100,000,000 mark in benefit payments in December.

Hospital Care has the distinction of being North Carolina's oldest voluntary health service plan open to the public. The Association was organized August 5, 1933, with $250 in capital. In 1963 it paid out that much in benefits every two minutes of every working day. Total benefit payments for the year amounted to $14,387,775.66.

Currently, Hospital Care Association benefit payments average approximately $1,300,000 per month, $300,000 per week, and $60,000 per working day.

Rising hospital costs, enrollment growth, and increased utilization are the factors chiefly responsible for the Association's ever-increasing benefit payments. As hospital charges continue upward, Blue Cross benefits are being increased to meet them. To a lesser extent this is also true of increases in Blue Shield allowances to meet higher surgical and medical costs.

The staff of the benefits department was increased during the past year to meet the increased demands for service. Prompt handling of claims was stressed. Most hospital and physicians vouchers were approved for payment the same day they were received.

Workshops, designed to facilitate the prompt and efficient processing of claims, were conducted by the Benefits Department for hospital personnel in all sections of the state. Similar conferences for physicians' secretaries are planned for 1964.

Enrollment Gains

Enrollment continued upward, with a net gain of 29,431 new members for the year. Total membership increased to 462,976. This 7 per cent gain is almost three times greater than the national average of 2½ per cent.

Notable enrollment achievements during 1963 included a state-wide "Easy-Joining Days" non-group enrollment and the acquisition of the large Southern Bell Telephone and Telegraph Company group account.

The "Easy-Joining Days" open enrollment was conducted in April as a joint endeavor with Hospital Saving Association. Approximately 7,000 new

members were enrolled during the "Easy-Joining Days" program.

North Carolina employees of Southern Bell Company and their dependents were enrolled as part of a nine-state enrollment of more than 70,000 Southern Bell Company employees. The 5,662 employees of Southern Bell in North Carolina enrolled in Blue Cross and Blue Shield were divided between Hospital Care and Hospital Saving. Hospital Care will act as control plan for the program in North Carolina.

Upgrading of benefits on both existing contracts and new sales was continued on a year-round basis. Room allowances and surgical schedules were increased on many thousands of group and nongroup contracts. Endorsements covering in-hospital medical care, cancer and dread disease, oral surgery, and out-patient care in physicians' offices were sold to thousands of new and old subscribers. Sale of the special Student and Senior Citizen certificates was promoted by separate campaigns in the fall.

Blue Shield Developments

In its first full year as a Blue Shield Plan, Hospital Care directed its main efforts toward converting existing memberships to the Doctors Program. A total of 29,698 Doctors Program members were enrolled during the year.

Blue Shield Participating Physician agreements were signed by a number of additional physicians, bringing the total number of such agreements in force to 2,205, or 62 per cent of the state's total physician population.

A major development was the approval of a $6,000 Blue Shield service program by the House of Delegates in Asheville in May. Under this new, higher level service plan, Participating Physicians will accept the Blue Shield benefit schedule as full payment for their services for families with incomes of less than $6,000, and individuals with incomes under $4,000, when no other insurance plan is held by the patient. The plan is being offered in addition to the existing program for families with incomes not in excess of $4,200.

Federal employees and their dependents, covered under the Federal Employee Program, are the first group in North Carolina to have this coverage. This large group became effective November 1. The surgical schedule under the program is now being offered on certain of our other programs and will soon be added to others.

The creation of a new $6,000 service program means that two different levels of service benefits are now available to the people of North Carolina. This is a most encouraging development, and, in the opinion of HCA staff personnel, should greatly accelerate sale of Doctors Program certificates.

Another development of special concern to physicians was the establishment of a new Physicians Relations Department, in order to meet the increasing demands of Blue Shield programs. D. Parker Morton was appointed manager of the department.

As Physicians Relations Manager, Morton will be primarily responsible for planning and conducting an active program of communications with all physicians. He will schedule visits for instruction and education of claims personnel and for general audits of records relative to Blue Shield claims.

The Blue Shield Newsletter, a new publication designed to keep HCA Participating Physicians and their office assistants informed about significant new Blue Shield developments, was inaugurated in the fall. The Newsletter will be published bimonthly for dissemination to all participating physicians.

Administration and Planning

Programming for the IBM 1401 data processing equipment continued. This modern computer will make it more economical for the Association to handle expanding work schedules as enrollment and claims volume increases.

Public Relations and Advertising

The Public Relations Department conducted a comprehensive, continuing educational and advertising program directed to the Association's several primary publics, i. e., enrolled groups; nongroup subscribers; member hospitals; participating physicians; group prospects, civic clubs and other community groups; our own employees and their families; and the general public. Both mass media and personalized newsletter mailings were used to reach these publics.

In advertising, we continued sponsorship of a weekly 15-minute industrial "Profile" program on the state's two largest radio stations, and the "Medicine of the 60s" series of hour-long medical documentary films on five TV stations. We cosponsored, with the South Carolina Plan, "Projection '63," a new series of locally produced 30-minute health documentaries, and a weekly TV news show on station WLOS, Asheville. Newspaper and magazine advertising and publicity was carried out yearround in daily and weekly papers and state magazines. Extensive advertising and promotion was done for the "Easy-Joining Days" open enrollment program, jointly sponsored with the Chapel Hill and South Carolina Plans. Special Student Certificate and Senior Citizen enrollment campaigns were conducted. Personnel of HCA made many talks to civic clubs and other groups on rising hospital and medical costs. The Public Relations Director served as Chairman of the North Carolina Committee on Nursing and Patient Care, a state-wide group representing the major health disciplines and the public, dedicated to general improvement of patient care.

Financial Condition

Although the addition to reserves was not as much as in the previous year, the financial condition of the Association remained sound. As of December 31, 1963, assets were $9,342,726.69, with liabilities of $4,250,384.00 and a reserve of $5,092,342.69. The reserve fund was equal to 3.85 months

of average operating expense, which is sufficient to meet the requirements of the national Blue Cross and Blue Shield approval programs and the North Carolina Department of Insurance.

The confidence, cooperation, and encouragement of its participating physicians contributed importantly to the progress of Hospital Care Association made in 1963. The Association expresses its gratitude for this continuing support.

J. Street Brewer, M.D.
Chairman

ANNUAL REPORT OF DELEGATES TO AMERICAN MEDICAL ASSOCIATION

Report of Delegates to American Medical Association 112th Annual Meeting AMA House of Delegates, Atlantic City, June 17-21, 1963. —See NORTH CAROLINA MEDICAL JOURNAL, Vol. 24, No. 8 (August 1963), page 348.

Report of Delegates to American Medical Association, Clinical Meeting, Portland, Oregon, December 1-4, 1963. —See NORTH CAROLINA MEDICAL JOURNAL, Vol. 25, No. 3 (March 1964), page 122.

AUTOMOTIVE CRASH INJURY RESEARCH REPORT
1963

Ten years ago, well in advance of general awareness by the driving public, the North Carolina Highway Patrol was engaged in a research project concerning seat belts and passenger crash protection. This program, inaugurated in 1953 in cooperation with Cornell University in New York, and continuing today with the Cornell Aeronautical Laboratory, reflects great credit on the North Carolina Highway Patrol, and is illustrative of their forward-looking philosophy. Actually, the first pilot study by Cornell was inaugurated in Guilford County in the Fall of 1953.

There have been many changes in passenger car safety during the decade since 1953. During that period, seat belts grew from the status of a distinct anomaly to the point that, beginning in 1964, they will be standard equipment on all U.S.-manufactured cars. Padded dashboards, unheard of in 1953, now appear on many many cars. Safety door locks, non-existent in 1953, became a standard—if unnoticed—safety device beginning in 1956. The recessed-hub steering wheel is now standard in virtually all U. S. cars. In several cases, the effectiveness of these safety devices has been adequately demonstrated and their benefits have been translated into thousands of lives saved annually.

These devices are available to the American driving public because facts were gathered to show that many serious injuries and deaths were being produced by specific objects of the car's interior. The North Carolina Highway Patrol is one of the foremost organizations in conducting this program of surveillance of highway accidents—in supplying such information.

North Carolina was one of the first states to enter into the vital research program with Cornell University, and since its entry in 1953, has shown the way for more than 25 other states that have followed. Not only was North Carolina an early participant, but has continued to participate throughout the decade, and continues to do so today. North Carolina has supplied thousands of well documented cases and has thereby materially added to scientific knowledge of automobile accidents.

The program works like this: a certain area covering several counties is selected for sampling. When an injury-producing accident occurs in the sampling area, a patrolman, after having discharged his primary duties, completes a special ACIR accident report form and photgraphs the damaged interior and exterior areas of the car. This procedure is designed to determine the specific causes of injury. Next, cooperating physicians describe injuries sustained. The work of the patrolmen, the physicians, and the many others cooperating in the program is strictly voluntary—there is no additional compensation. There is no higher indication of the concern these people have in highway safety than to note that they devote extra time to this kind of investigation.

At Cornell, this information, along with that coming from a number of other states, is stored on magnetic tape and statistical analysis is performed with the help of a large electronic computer. The project, called Automotive Crash Injury Research, originated in 1953 in the Cornell University Medical School (in New York City), and is now a part of the Cornell Aeronautical Laboratory, Inc. (Buffalo, New York).

That these investigations have played a part in observable safety improvements in cars can be illustrated by the following: One of the earliest findings from data supplied by North Carolina and a few other pioneer states was that when a person is thrown from a car in an accident (if a door springs open) the chances of serious injury or death are increased severalfold. While it is true that occasionally a person is not hurt when thrown from a car, normally the risk of death is increased from two to tenfold, depending on the type of accident, if the person is ejected.

When this information became available, and was substantiated by parallel research within the automobile industry, automobile safety door locks were introduced. Information collected subsequent to the introduction of these locks has shown that door openings have been reduced appreciably, and so have ejections, with the result that a large number of lives have been saved by the operation of this safety device. Similar procedures have been followed in the evaluation of seat belts and instrument panel padding.

The research is, however, far from complete

because constant changes are being introduced into automobile design. Perhaps the most noteworthy recent change has been the introduction of the smaller car, and its role is currently under evaluation. Another topic of considerable importance that certain states will soon undertake is the collection of information on mechanical failure of the vehicle as a cause of accidents. This is a difficult area to study, but one that is vital to the safety of the motoring public.

Dr. B. J. Campbell, Assistant Director of the project, received the Ph.D. from the University of North Carolina at Chapel Hill in 1960. During the time that he was at Chapel Hill, he was an Assistant Director of the Institute of Government, and worked with various divisions in the North Carolina Department of Motor Vehicles. He states that, "In their cooperation with the Cornell program, the North Carolina Highway Patrol and the physicians and hospitals in the state continue to manifest the highest-quality service to North Carolina citizens. The patrolmen not only supply factual information, but do a considerable amount of 'detective' work in reconstructing the accident sequence. The highly professional performance of these troopers has produced a body of scientific data of demonstrated utility in defining sources of injury, and has been equally useful in giving critical evaluation of safety devices installed in American cars. The Cornell Aeronautical Laboratory and the Automotive Crash Injury Research project wish to salute and express deep appreciation to members of the police and medical professions in North Carolina for a decade of participation in the ACIR program."

Mr. William D. Coleman, Cornell Field Representative assigned to the North Carolina program for the past eight years, adds, "Our task has been made much more feasible by the leadership of Commissioner Edward Scheidt, Patrol Commander Colonel David T. Lambert, Enforcement Director Major C. Raymond Williams, and by the coordination performed by Administrative Assistant Lt. Charles B. Pierce. The willingness and cooperation of all the North Carolina Patrolmen has been outstanding, and reflects the esprit de corps manifested by all within this organization."

The North Carolina Highway Patrol has a many-phased program designed to preserve the lives of North Carolinians, and it should be noted that one phase has been their contribution of crash injury data. In addition to the work of the North Carolina Highway Patrol, it is proper to emphasize that many hundreds of individual physicians have also cooperated by giving voluntarily of their time by collecting medical information on accident victims. These physicians, in many cases working through local hospitals, have gone out of their way to provide information describing the nature and extent of injuries suffered in the automobile. The North Carolina Department of Health, under the direction of Dr. J. W. R. Norton, has coordinated this effort for all these years, and has contributed greatly to the program.

Without the cooperation of these professionals in their fields, safety devices existing on today's cars might be absent, and the possibility of evaluating their performance would be lost.

William D. Coleman
Field Representative
Automotive Crash Injury Research
Cornell University
Buffalo, New York.

COMMITTEE ON AWARDS

From the 12 Society Sections only five (5) papers from four (4) Sections were sent to the Committee on Scientific Awards for judging.

Only 4 of the 10 Committee members reported their judgments on these five papers. Two of these 4 Committee members noted the poor quality (or less than prize winning quality) of the presentations they were asked to judge, and the small representation of the Society in the papers submitted, and recommended that no Moore or Wake County Awards be given this year.

There was no majority agreement on the best Audio-Visual presentation.

Therefore, in view of the above, I feel that I, as Chairman, have no choice but to report that the Committee on Scientific Awards did not find winners for the Moore County Award, the Wake County Award, and the Gaston County Audio-Visual Award.

I regret very much that I feel compelled to make the above report.

Lester A. Crowell, Jr., M.D.
Chairman

THE SUBCOMMITTEE ON PUBLIC EDUCATION OF COMMITTEE ON MENTAL HEALTH AND MEDICINE IN RELIGION

To create interest, understanding and concern about mental health problems at the community level, a program of public education must be identified with and directed by the medical society. The local mental health committee must be the nucleus for providing this leadership by becoming knowledgeable and available as participants and consultants to other groups interested in mental health, such as the local mental health association, medical auxiliaries, ministers, PTA groups, mental health councils, and local mental health authorities.

County medical societies are experiencing various degrees of interest in the mental health program. Some county medical societies through efforts of individual doctors, groups of doctors and the county medical society committee on mental health are taking leadership in providing mental health facilities and services for their county by participating and cooperating with the county mental health councils and the county

mental health authority. Other county medical societies report apathy and resistance. This was attributed to the lack of proper information about the mental health program and an unwillingness to accept federal funds. Workshops on mental health subjects of special concern to specific groups have proven extremely effective in the past when put on by local mental health associations. Sponsorship and direction by the medical society would give even greater impact. These programs will stimulate patients to discuss their problems with their doctor.

In summary, this committee recommends: 1. Inform the public and communications media on positive mental health issues and developments. 2. Develop support behind the plans for a comprehensive mental health program for North Carolina. 3. Develop local medical concern to assure the rights of the mentally ill. 4. Provide leadership, guidance and support to local mental health associations. 5. To find needs and determine action indicated in local provision of the following services and facilities. A. Community Mental Health Clinics. B. Rehabilitation facilities. C. Day and night care facilities. D. Agencies to handle special local problems such as the aging and alcoholism.

A. H. Zealy, Jr., Chairman

REPORT OF THE EXECUTIVE DIRECTOR

As required by you, I am pleased to present this report for 1963-64 encompassing my activity as your principal administrative officer. Seventeen years of stewardship have passed since your assignments in the establishment of the Headquarters Office in 1948. These have been busy years, maked by growth in your understanding and, of course, in the assignments and work of the headquarters staff. We sense that we have performed usefully and that marked progress has attended the accomplishments and the achievements of these long years of service, which now attend chronological age, modified physical capaciites, but, thank God, knowledge and intellectual attainments which mark us for effective service in the future years left to us as servants of your causes. Health has been a blessed factor and we pray the good status can linger in these golden years of service.

To have been assigned the effort-companionship of Dr. John Rhodes during these past years, particularly in the year of his Presidency has been something uniquely to be desired. To Doctor John I convey the sense of this high privilege of joint service for the Medical Society. No man could practice a higher level of concept of duty and loyalty than this President has exemplified in the strength of moral, righteous and intelligent leadership. I should pray that his great counsel would ever be available to me and to the Medical Society in all the courses we take together in future years. You know well that the record of accomplishment produced for you through the leadership of this good man will linger long in the annals of medical and professional undertakings. In reporting to you, we sense that all of the intra-functions of the Society have been planned well and carried to success fruitfully, even in respect to some very difficult fiscal confrontations. Your operations are sound—fiscally and administratively—as is portended in the reports you have before you and as the tone and trend of your affairs have found in interplay upon the progress of health and medical care exemplified in the practice of medicine in this state.

For these factors you have to thank the intelligence, the effort and sacrifices of your leaders during the past year. Despite the grave cloud which has developed about the Journal operation —a 58% decline in national advertising and the loss of the great knowledgeable and capacious Editor, Wingate Memory Johnson, we can report that we have cause to hope for better times. Despite an imbalance budget authorization with added declines of advertising and exhibits we weathered 1963 with a substantially balanced budget. The fiscal result was sound as attested by all concerned. Generally, this has obtained through all the year 1957 to 1964. With the proper determinations, we shall go on through 1964 with equal success though the oppressions of government and the designs of evil leaders outside of medicine continue the practice of excoriating the profession at every turn of the moment.

For the year we report some data as a guide to the Society operations:

A. Processible Mail received	19,658
B. Mail Dispatched	88,188*
C. P. R. Bulletins	33,949
D. Distributive Educational Material (sent)	23,977
E. Press Releases	8,761
F. (a) Telephone**	6,567
(b) Telegrams	78
G. Reports	1,453
H. Reviews	1,893
I. Conferences	153
J. Meetings	128
K. Radio Transcriptions	3
L. Talks	29

*Includes P. R. Bulletins

**Telephoning subsequent to December 15 is based on estimates related to Watt Line services.

There has been on the rolls more than 3500 members in 1963. The net gain of 1963 over 1962 (less attritions related to the first figure) was 112. We closed the year with the highest level of membership in the history of the Society or 3434.

We, of the administrative staff, value the decision of support through action of the 1963 House of Delegates related to dues. For the most part there has been a proper understanding of the growth necessity and comparable with other and, particularly, similar states and other healing professions North Carolina is not near the top in dues implications. Your success, I believe, depends upon this kind of continued support. We pledge the most effective in management of which we are capable.

We point with pride to physicians placement as an activity. We hope you read our report on this published in the Journal a few weeks ago. The need for medical manpower in the State is great. We hope to effect a continued mark of progress in all aspects of placement.

The 1963 Audit Report is presented for your approval in respect to the operation of the Treasury. We hope it depicts a valiant effort of all your officials, the Finance Committee and your Executive Director to meet a difficult situation with success.

We shall not conclude this report without evaluating, healthily, the contributions of the several serving the headquarters staff. Particular tribute is paid to Mrs. LaRue King as Chief of Office Operations whose executive capacity has grown so markedly over the many years of her service to the Society. Mr. William Hilliard has shown a diversity of capacity growth, particularly on special assignments and more concern for general activity in relieving others. Overall, this staff is one to produce the pride of the official family of the Society and the marked gratitude of your Administrator.

In concluding, I again refer to the year 1963-64 and thank Dr. Rhodes for his fortitude and his constant forbearance. He has been a good fellow with which to travel and I have enjoyed his work in the vineyard. Moreover, I look with pleasure to go on in these endeavors with your new President, Dr. Ted Raiford. With a unity of purpose the profession may weather the storms which are on the horizons of government, third-partisan and the "muggers" which would destroy your profession and the high level of medical care which you have provided our people. In the effort, I know we shall continue together, I look for the strength and the will to carry on.

Respectfully submitted,
James T. Barnes
Executive Director

ANNUAL CONVENTION COMMISSION MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA

COMMITTEE ON AWARDS:

The Committee on Awards recommended that the Gaston County Award for the outstanding scientific exhibit be given to the winner at the time of the annual meeting rather than a year later, as has been done in the past. The Chairman of the Committee will meet with any committee members present on Monday morning of the annual meeting, review all exhibits, and determine the winning exhibit at that time. If no committee members are present other than the Chairman, he will be empowered to appoint two ex officio members who will judge with him. A plaque or ribbon should be available for placement on the winning exhibit immediately after the choice is made. It was suggested that a photograph of the exhibitor, his exhibit, and the topic presented be given to the Publicity Department during the annual meeting so that appropriate recognition will be given to the winner. It was suggested that a summary of the information presented in the exhibit, along with a short writeup about the exhibitor. appear in the NORTH CAROLINA MEDICAL JOURNAL as soon after the meeting as possible. At the 1964 meeting in Greensboro, the award for 1964 will be presented as indicated if this method is approved, and the award for 1963 will also be presented by the Chairman of the Committee.

It was suggested also that the selection committee choose a second and third place winner and that ribbons be awarded to these exhibitors during the meeting and that ribbons be placed on the exhibits that have been selected.

The Moore County Award is for the author of the best scientific paper presented at the annual meeting. It was suggested that the Section Chairmen be notified to appoint a committee to determine the best scientific paper for each Section and that the name of the author and the paper be submitted in writing on a previously printed form to the office of the Executive Director who, in turn, will present them to the Chairman of the Awards Committee. The Chairman of the Awards Committee will then write to each section essayist whose name has been submitted and notify the essayist that he (or she) is eligible for first prize if a completed paper is submitted to the Chairman within two months. The Chairman will then reproduce and distribute to the committee members the various papers that have been submitted and ask for a numerical rating of the papers. All of the papers will be submitted to the Editor of the NORTH CAROLINA MEDICAL JOURNAL, and the winning paper will be published in the Journal along with a photograph and a brief biography. The essayist should receive formal recognition by the President at the next annual meeting of the State Medical Society.

The Cooper Memorial Award is given annually by the Wake County Medical Society for the best scientific paper on the subjects of preventive medicine, maternal or child health, or public health. The same procedure should be followed for determining the winner of this award as was mentioned for the Moore County Award.

COMMITTEE ON SCIENTIFIC WORK:

The Annual Scientific Program was discussed in detail and the consensus was that the Monday program for 1964 would include a panel discussion concerned with Hypertension (Surgical and Medical). The Tuesday program will be concerned with Preventive Medicine (Cytology and Immunization). On this date there would also be a Clinical Pathological Conference. Wednesday would include the usual program with a conjoint session with the State Board of Health, with not more than two speakers addressing the group and their time limited.

COMMITTEE ON ARRANGEMENTS:

The Committee discussed in detail the physical facilities available for the 1965 meeting in Charlotte. The Merchandise Mart was recommended as the meeting place. The necessary mechanics have been worked out for banquet, the exhiibts and the meeting rooms. The banquet will be at the Park Center and will be catered.

Discussion continued about the Greensboro meeting for 1964. The auditorium is to be the location of the meeting. The Chairman of the Committee on Arrangements had available all the details concerned with various aspects of meeting rooms, exhibits, annual banquet, and registration. Paramedical groups will be allowed to register and attend meetings. The Committee recommended that no registration fee be charged for nonmembers of the State Medical Society eligible for attending the meeting. The final decision was left to the Executive Committee.

COMMITTEE ON AUDIO-VISUAL SCIENTIFIC POST GRADUATE INSTRUCTION:

The Committee members agreed that Monday and Tuesday of the annual meeting were the most appropriate days for showing audio-visual and instructional material. Four sessions would be prepared and would be presented in the morning from nine to eleven and in the afternoon from two until four-thirty. A meeting room large enough to accommodate 120 persons was requested. The Committee will make an effort to include material concerning Hypertension and Preventive Medicine, in keeping with the general theme of the meeting. Other topics will be included for the general membership. Each member of the Committee will rotate as moderator of the Audio-Visual Program. Equip-

ment will be furnished by the University of North Carolina School of Medicine and medical students will serve as projectionists.

COMMITTEE ON SCIENTIFIC EXHIBITS:

Selection of exhibits for the 1964 meeting was well under way by September of 1963. A continued search for high quality exhibits was in progress. The various members of the Committee were asked to solicit exhibits in their communities, from the teaching centers and from out-of-state exhibitors. It was pointed out by the Chairman of the Committee on Scientific Exhibits that the best exhibits shown at the AMA in 1963 were reserved for the Spring of 1964 within one week following the AMA meeting. This implied that the Chairman of the Committee on Scientific Exhibits or his representatives should attempt to reserve outstanding exhibits shown at the American Medical Association meeting in June of a given year for the North Carolina State Medical meeting in May of the following year. A discussion was held concerning miniature exhibits and the use of these inexpensive, readily prepared exhibits will be emphasized during the next few years.

The Chairman of the Committee on Scientific Exhibits has, in the past, received approval to cover the American College of Surgeons meeting for solicitation of exhibits.

Certain details relative to exhibits and solicitation were mentioned.

1. Headquarters office include a form in the letter of acceptance to the exhibitor requesting predominant background color of the exhibit. This would aid in preventing severe color clash as the exhibits are set up.

2. The Committee requested that an article be included in the October issue of the Public Relations Bulletin each year, emphasizing the importanc and need for high quality exhibits.

3. The Committee requested the Headquarters Office to include, in the letter of instructions to exhibitors, that exhibits may be shipped directly to the Coliseum and will be held there until the exhibitor will set the exhibit up.

4. Requested that applications for exhibits be sent out earlier and be allowed a longer interval for return. Requested also that all forms be returned to the exhibit Chairman.

COMMITTEE ON MEDICAL GOLF TOURNAMENT:

The golf tournament will be held on Monday, May 4, and Tuesday, May 5, at the Sedgefield Golf Course. The Calloway system will be used for determining final scores. The headquarters office will arrange for the prizes and will have them available on Wednesday, May 6. Players are advised to become familiar with the rules of the course. All those participating in the golf tournament should plan to complete all putts.

MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA BUDGET ESTIMATES

January 1, 1964 to December 31, 1964

RECEIPTS: (ESTIMATED)		$250,980
Estimated balance January 1, 1964	Nil	
Assessment 2998 paying members*	179,880	
Sales (estimated on 1963)	1,400	
Author Contributions to Cuts	300	
Revenue Unexpected (estimated)	300	
Technical Exhibits (estimated)	21,000	
Journal Net Advertisement (estimated Local on 1963)	8,000	
Journal Net Advertisement (estimated National on 1963)	32,000	
**AMA Remittance 1% of dues processed (estimated on 1963)	1,350	
Annual Banquet Aevenue (900 @ 7.50 each)	6,750	
EXPENDITURES: (Estimated)		243,035
Schedule A	95,779	
Schedule B	61,271	
Schedule C	25,101	
Schedule D	6,099	
Schedule E	12,500	
Schedule F	28,500	
Schedule G	13,785	
EXCESS OF RECEIPTS OVER EXPENDITURES		7,945
EXCESS OF EXPENDITURES OVER RECEIPTS		

RESERVES: (Costs, 26,104.55 - Land) 120,321.74 / 11,160.646 Shares

SUBMITTED TO COMMITTEE ON FINANCE Sept. 15, 1963

SUBMITTED TO EXECUTIVE COUNCIL FOR APPROVAL Sept. 29, 1963

SUBMITTED TO HOUSE OF DELEGATES FOR APPROVAL ———, 196—

*Based on dues @ $60 per member per annum

**To be appropriated to Secretarial Budget A-6

MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA 1964 ESTIMATED BUDGET ACCOUNTS

A. EXECUTIVE BUDGET		95,779
A-1 President, expense of (travel and communications)	5,000	
A-3 Secretary, travel of	1,000	
A-4 Executive Director-Treasurer salary of	16,000	
A-4 Executive Director-Treasurer travel of*	1,000	
A-6 Executive Office, Secretarial		

and Clerical Assistants** 33,500
A-7 Executive Office, equipment for and/or replacements 1,000
A-8 Executive Office, expense of (12 months rent, communications, printing, and supplies, repairs and replacements of expendables) 10,800
A-9 Bonding (in effect to 1966) Nil
A-10 Audit (Quarterly & Annual) 700
A-11 Taxes (salary tax) 1,278
A-12 Insurance fire, compensation and employer's liability 230
A-13 Membership Record System (addition to) 100
A-14 Publications, reports and executive aids 200
A-11 Insurable: interest insurance and retirement plans 1,371
A-16 Assistant Executive Secretary of Public Relations, salary of 10,500
A-17 Rural Health Consultant, salary of 5,300
A-18 Assistant Executive Secretary, travel of 1,800
A-19 Rural Health Consultant, travel of 2,000

*Basis: Real for personal maintenance and travel @ 7c per mile and/or common carrier rate and for official purposes.

**Any revenue derived from collection efforts related to American Medical Association dues and processing of same shall accrue to this item of the Budget.

B. JOURNAL BUDGET 61,271
B-1 Journal, publication 39,000
B-2 Journal, cuts for 700
B-3 Editor, salary of 2,310
B-4 Assistant Editor, salary of 4,320
B-5 Editorial Office, expense of (12 months rent, communications, printing and supplies, repairs and replacements) 450
B-6 Journal Business Manager's Office, expense of (12 months communications, printing and supplies, repairs and replacements) 450
B-7 Business Manager's Office, Equipment for 100
B-8 Journal, travel for (Local and National) 200
B-9 Taxes (salary tax) 241
B-10 Sales tax on Journal subscriptions and Roster sales 500
B-11 Roster, publication 4,000
B-12 Executive Council Reports, Transactions, Annual Reports, printing of 9,000

C. INTRA-FUNCTIONAL ACTIVITY BUDGET 25,101
C-1 Executive Council, expense of and travel of Councilors including district travel 2,500
C-3 Legislative Committee, expense of (Local and National activity) 7,000
C-4 Maternal Health Committee, expenses of (secretarial, Communications, printing and supplies) 3,600
C-7 Scientific Exhibits Committee and Audio-Visual Program, expense of 825
C-8 Committee on Mental Health 500
C-9 Committee on Grievances 200
C-10 Committee on Chronic Illness 2,500
C-11 Committees in general, expenses of 3,000
C-13 Committee on Occupational Health 200
C-17 Committee on Student AMA (Section & Transportation & Delegate to SAMA one each Medical School Chapter (3) 1,126
C-18 Committee on Military & Emergency Medical Service 500
C-19 Committee on Industrial Commission Nil
C-20 Committee on Constitution and By-Laws Nil
C-21 Committee on Medical Legal 100
C-22 Committee Advisory to N. C. Highway Patrol on Traffic Safety 100
C-23 Committee on Venereal Disease 150
C-24 Committee on Anesthesia Study Committee 400
C-25 Blue Shield Deputation to National Blue Shield 200
C-26 Committee on Blue Shield 250

C. INTRA-FUNCTIONAL ACTIVITY BUDGET
C-27 Committee on School Health 500
C-28 Committee Advisory to N. C. Board of Public Welfare 150
C-29 Committee on Post Graduate Medical Study Nil
C-30 Committee on Liaison to Insurance Industry 500
C-31 Rural Health Function (stationary) $200; Sponsorship of 4-H Health activity for one trip to National 4-H Club for State Health Winner, $500; & Dues Rural Health Safety Council, $100 800

D. EXTRA FUNCTIONAL ACTIVITIES BUDGET 6,099
D-1 Delegates to AMA, expense of

(4 to each annual and Clinical Session) 3,449
D-2 Conference dues 150
D-3 Woman's Auxiliary (contribution to entertainment, travel to National Auxiliary for 2 and productions; History factory-$300.00) 2,500

E. PUBLIC RELATIONS BUDGET 12.500
E-3 Committee Chairman, out of State travel 500
E-5 Public Relations Equipment for 750
E-6 Public Relations Office, expense of (12 months rent, communications, printing and supplies, repairs and replacements) 5,000
E-8 Publications and Executive Aids 100
E-9 Audio-Visual depiction; photography, radio-motion picture, production, distribution and printing, purchase of films, etc. 300
E-10 Educational distribution; reprints, periodicals, press materials, pamphlets and dodgers for educational purposes; production, distribution and printing, binding, stuffing and mailing 500
E-11 News and press releases, production and printing of 400
E-12 Public Relations Bulletin, production and printing of 2,500
E-13 State High School Science Fair Program, expense of 200
E-14 Exhibits and Displays: Purchase, rental, production, fabrication and transportation of 650
E-15 Annual Officers Conference 1,000
E-16 Physicians Press Award Nil
E-17 Public and personified activities in the field of Public Relations 600
E-18 Collateral Public Relations with other committee activities Nil

F. ANNUAL SESSIONS (109th) CONVENTION BUDGET 28,500
F-1 Programs, Production of 1,700
F-2 Hotel and Auditorium expense 4,500
F-3 Publicity promotion, expense of (reporters and expense) 800
F-4 Entertainment (general involving personnel) 900
F-5 Orchestra and floor entertainment 2,500
F-6 Guest Speakers (5) expense of and/or for honorarium for 1,000
F-7 Banquet Speaker, fee and expense 550
F-8 Electric Amplification, operators, installations and screening auditorium Nil
F-9 Booth installations, supplies, expense, signs, (Scientific and Technical) including exhbit space & promotion 6,000
F-10 Projection, expense of (service rentals) 700
F-11 Badges (members, guests, exhibitors, auxiliary) 100
F-12 Reporting Service for Transactions (sessions & sections 13) 1,200
F-13 Rental, extra facilities, trucks for sections and/or exhibits 250
F-14 Exhibitors entertainment (at 5% of Exhibit Income) 1,500
F-15 Banquet expense and places for members remitted 6,500
F-16 Police Security 300

G. MISCELLANEOUS BUDGET 13,785
G-1 Legal Counsel, retainer fees for 6,000
G-2 Reporting (Executive Council, etc.) 1,700
G-3 Fifty Year Club pins and certificates, and President's Jewel 310
G-4 Contingency and emergency 1,200
G-5 Retirement system for Society employees 3,400
G-6 Advalorem Taxes 325
G-7 Association of Professions Loan 350
G-8 N. C. Hospital Association Recruitment Program Health Careers 500
G-9 AAMC (Asscociation of American Medical Colleges) Nil

Minutes of Executive Council Meetings

MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA

MEETINGS OF THE EXECUTIVE COUNCIL FALL MEETING

SUNDAY MORNING

September 29, 1963

The Executive Council Meeting of the Medical Society of the State of North Carolina held at the Mid Pines Club, Southern Pines, North Carolina, convened at ten o'clock, Dr. John S. Rhodes, President of the Society, presiding.

PRESIDENT RHODES: I am going to ask George Paschal to give the invocation.

DR. GEORGE W. PASCHAL: (Rendered an invocation.)

PRESIDENT RHODES: Gentlemen, I want you to know that I am really proud to have the opportunity to hold this position, and at the same time I recognize a large responsibility. I need your guidance and your help. I would invite full discussion of all matters that come before the Council, but I would urge you to stick to pertinent facts relating to the matter before us.

We have a long agenda, and we will have to move along judiciously in order to complete it at a reasonable time.

I am going to ask the Secretary if he will now call the roll.

DR. CHARLES W. STYRON: (Called the roll.) A quorum is present, Mr. President.

PRESIDENT RHODES: The first item on our agenda is the presentation of the minutes of the last meeting of May 4 in Asheville.

DR. WILLIAM A. SAMS: I move that they be received for information.

(The motion was seconded by Dr. Dewey H. Bridger.)

(The motion was put to a vote and carried.)

PRESIDENT RHODES: We will go to Item 5, Report on Legislative Activities. I will ask Ed Beddingfield to give us a report.

DR. EDGAR T. BEDDINGFIELD, JR.: Thank you, Mr. President.

Commissioner Fleming Fuller calls to your attention that there is under his Commission Report also a report from the Legislative Committee. But these remarks that I will make at this time will encompass the report on legislative activities with his report of the legislative committee, so there will be no duplication.

We would like to make a very brief report and to touch on the areas of state legislation and national legislation.

As all of you of course know, the biggest news in state legislation was that for 1963 General Assembly enacted the Kerr-Mills Law, which this Society supported vigorously, and along with it a companion appropriation bill. This Kerr-Mills Program is now therefore in the hands of the State Department of Public Welfare, who is working out the details of the program to make it operational, and I would like to comment that Commissioner R. Eugene Brown and his staff have been in close communication with representatives of this Society, and with other interested groups in the health field, to try and get our ideas and he has offered to represent them very warmly. I think we have a very good relationship with them.

The procedure under Kerr-Mills to make it operational and of benefit to the people who qualify in this state is as follows: A formal Kerr-Mills program has to be formalized and written and this is being done in liaison with the various interested groups, medicine, pharmacy, dentistry, hospital administrators, and others.

Commissioner Brown and his staff have visited some other states in an effort to cull the best parts out of their programs, and in an effort to prevent certain difficulties that other states have experienced in their Kerr-Mills Program. He is about ready to present the first draft of his proposed Kerr-Mills Program in a written form, and to allow the various disciplines to read this over and perhaps offer suggestions and criticism.

After his final draft of the North Carolina Kerr-Mills Plan is written, it will then go to the regional HEW headquarters in Charlottesville, Virginia, where it is subject to revision and approval; and from thence to Health, Education and Welfare headquarters in Washington. If it is approved there, we are then in business.

It is hoped and anticipated that by the end of this year, the program will be operational.

The Legislative Committee is well aware that it will be a duty of the Legislative Committee, and a responsibility, to clarify the status of this Kerr-Mills Program as it goes along, and to transmit information by way of the Public Relations Committee immediately as these steps actually are taken and the program becomes operational, so that there will not be an unseemly time lag between the availability of the program and its implementation in the various counties of the State.

Other activities of the state legislature that we think deserves some comment: First of all, the new State law regarding sterilization was enacted. This is very similar to the Virginia statute on sterilization that has been discussed here before, and simply legalizes the voluntary sterilization of males or females outside of the eugenics concept of sterilization. It may be done for socio-economic reasons without fear of civil action against the physician later on, if he complies with the provisions of the law, which essentially are consultation with one

other physician and a thirty-day waiting period between the signing of the documents and the performing of the operation.

There has been a little misunderstanding about the sterilization law and some questions raised.

Well, the answer seems to me, according to the best opinion that we can get, no. No one has to do any differently from what they have been doing; but they have to do it if they want the protection of this law. That is the essence of it.

Another thing that needs to be covered, because it affects our day-to-day practices, is the change in the vital statistics law regarding the filing of death certificates. The physicians have a new responsibility as a result of this legislation which we endorsed, along with the State Board of Health at the time it was introduced, and I think that this needs to be clarified and new responsibilities of the physician pointed up, so that we can all comply with the law as it now stands.

One thing that I think would require some Executive Council action at the state level is this: During the 1963 General Assembly, Senator Wm. D. James, M.D., became very interested in sponsoring some sort of legislation that would provide for the training of certain ancillary medical personnel which are said to be in short supply, particularly in the smaller hospitals throughout the state. I refer specifically to laboratory technicians and nurse anaesthetists.

He introduced some legislation to that end. He later on found out that the legislation he had introduced was not really necessary, and he was able to get an appropriation for scholarships for nurse anaesthetists.

Dr. James has reported to us that in his conversations with Dr. Charles Carroll of the Department of Public Instruction that if there is a demand, courses for setting up for the training of laboratory technicians can be accomplished within the existing statutes authorizing the industrial education schools.

The Legislative Committee was in a bit of an enigma about this legislation, because a certain segment of our membership, notably our group of pathologists, registered some opposition toward this departure in the training of ancillary medical personnel, fearing that this might result in the substandard training of personnel and that we would have inadequately trained people.

The group of technologists—and I have learned from this experience that there are various levels of medical technicians, technologists, those that go to a degree school and have more extensive training (I believe they are called ASCAP group) and the other group, which has a more abbreviated form of training is called the AMT group.

Well, the group with the higher and more intensive training registered opposition to this, and they were supported in this by the pathologists. So on the one hand we had a segment of our membership that was very much in favor of this and said indeed there was a desperate shortage of laboratory technicians and they wanted the state to get to the business of training these people, and on the other hand, another segment of our membership was very much opposed to it; and it posed a rather difficult position for the Legislative Committee to know how to regard this legislation in the legislature.

Apparently, the issue is not yet resolved. I understand that at least one industrial school, and perhaps others, have already set up training for laboratory technicians, and this is being opposed by the ASCAP group of highly trained technicians. In fact, they have asked us to meet with them at their annual session in October to discuss the other ramifications of this problem.

The Legislative Committee discused this rather thoroughly, and the Committee resolved to request the Executive Council to endorse a proposition whereby the President appoint an Ad Hoc Committee to study the problem of supply, demands, availability, recruitment and training of ancillary personnel, and to advise the Council regarding Society policy and attitude toward establishment of new training programs for such personnel. And that furthermore, the Society request the Department of Public Instruction to alert the Society's Ad Hoc Committee prior to setting up new programs of technical training in health-related fields.

I would like, at this point, to put that in the form of a motion, that we do this, because we feel that this is an area where we have diverted opinion within the Society membership, and in order for the Legislative Committee to convey an expression of Society policy, we need some help from this body.

PRESIDENT RHODES: You have heard Dr. Beddingfield's motion. Do I hear a second to his motion?

DR. PASCHAL: Mr. Chairman, I will second the motion just to open it for discussion.

I don't know exactly how many facilities we have in North Carolina for training the personnel to which this motion applies. I do know that there is a shortage, most everywhere, of ancillary personnel, but this health career program that is in operation now, will I believe provide applicants for schools. I believe that the shortage will be overcome.

I think that the study of this Committee would probably be of advantage to us, and then we would be in a position to make more firm recommendations.

PRESIDENT RHODES: The only observation I have is that some of the people who had opposed the establishment of schools under Dr. James' bill which, as Dr. Beddingfield has indicated, was withdrawn, have indicated that there are sixteen qualified, certified schools in North Carolina for the training of these people.

Dr. James told me, when I discussed this with

him, however, that the industrial education schools would establish curricula for any need that was demonstrated, and that is how this came about.

PRESIDENT RHODES: John, I believe you have some comment you might like to make on this.

DR. JOHN R. KERNODLE: I had a question. I was going to say that there has been some initiating movement in the IEC, which is Industrial Education Centers, fourteen or fifteen of them. Already they have set up curricula for technical training.

The second thing I was going to ask, as it comes to my mind, these sixteen that we have in the state are centralized around several centers. I wonder if the health career program has found that many of the individuals would like to stay closer to home, functionally and otherwise, to take these courses. And perhaps if that is true, then the IEC program would be beneficial, because they are scattered throughout the state, whereas your sixteen laboratory teaching groups are primarily in the centers.

DR. JOHN C. REECE: There are two in Asheville, Dr. Morrison and Dr. Lacey. Dr. Morrison has only one student; Dr. Lacey has only one, and they could double or triple their enrollments there.

The study of the shortage has been made by the Duke endowment. They have an extensive tabulation of shortage of medical personnel in both Carolinas, and they can tell you how many technicians and pathologists, and radiologists, and radiological technicians, and nurses, and nurses' aids and all, are needed. So if you will contact them, that would answer, to a great extent, our problem here.

DR. BEDDINGFIELD: I think that is true. But I don't think it is the province of the Legislative Committee. What we want is an expression of Society position, and I think if the Council sees fit to endorse this motion for an ad hoc committee, they would get all sources of information, including the Duke Endowment thing, and let Council pass an expression of policy which the Legislative Committee would then try to implement into action.

DR. THOMAS G. THURSTON: The main need of this—we have had a school and never had an application, because it requires three years of college. These industrial schools will give these people who don't go to school a chance to get some scientific education, one, two or three years, and then they can go into your hospitals, or other things, and pick them up.

We run an X-ray program, but we get these people because we take them right out of high school, just like the Industrial Education Center would. If you can get them interested in going to school, then you can get them into your interest, no matter whether it is scientific or not.

DR. KERNODLE: I think it is most important, as Ed has spoken, and I am strongly in favor of this Ad Hoc Committee to get the way clear as to what the Medical Society is going to stand for.

PRESIDENT RHODES: You have heard the motion. The motion is that we establish an Ad Hoc Committee to review this whole issue of training of technicians not only in the Industrial Education Centers, but in the qualified training schools as well, with the idea that we might establish a policy, a Society policy in this area.

Any further discussion? If not, so many as favor the motion will make it known by saying "Aye"; opposed, "No." The motion is carried.

DR. BEDDINGFIELD: I will now move into the area of national legislation.

At our meeting, we had a discussion pertaining to legislation at the national level with particular interest in the current status of the King-Anderson Bill. Although the promised hearings before the House Ways and Means Committee have been postponed many times this summer and this autumn, apparently due to the pressure of other business before the Congress, Chairman Wilbur Mills of the House Ways and Means Committee has indicated that as we have expected, he has promised that no vote on this issue will be held during this calendar year. He has also again stated that he will have hearings.

It is anticipated that the organized proponents of this legislation will become more active at the time of the hearings, and the Committee recommends that good liaison with our Congressmen in Washington be encouraged through Operation Hometown. The Committee notes regretfully that many counties have not reported to the State office their designated chairmen for Operation Hometown, and all county presidents are urged to submit this information.

We have no reason to think that this issue will not be voted on during this Congress next year. We think that we should review particularly, when they come home after they adjourn.

We think that the time will come when an intensive speakers' bureau, press relations, letter-writing campaign, et cetera, the intensive type of campaign with which we have become so familiar in the last few years will again have to be put into operation.

The Committee on Legislation has taken stands on other national issues before the Congress other than the King-Anderson Bill, and these have been courteously and I think considerately received by the congressional delegation.

As a matter of information, you know that the Aid to Medical Education Bill which we endorsed, only the bricks and mortar provision for medical school construction passed and is law.

On the mental health program, we also endorsed only the bricks and mortar proposal which would pay some part toward the construction of community mental health clinics, and we did not favor

those parts of that legislation which would pay for the staffing of these clinics in some other areas of activity in which the Federal Government proposed to move. However, this has passed, and the issue is now in a Conference Committee between the House and the Senate.

There is one last item on legislation. It was reported to the Legislative Committee that the 1963 Public Affairs Conference of the United States Chamber of Commerce in Washington was attended by the President of the Society, the Chairman of the Legislative Committee, and the Executive Director. Much valuable information was obtained from this meeting and there was a considerable opportunity for rather informal and valuable contact with the entire Congress.

The Committee suggested that the President and the Chairman of the Legislative Committee, and the Executive Director, plan to attend the 1964 Congress which is to be held January 29 and 30, 1964, in Washington, and that in addition, the Legislative Committee, from its budget, pay the registration fee of $25 each for up to five other physician members that might want to attend this meeting, provided that they pay their own personal travel and hotel expenses.

We think it would be very timely to send such a group up at that time, and we think that since there is a $25 registration fee which covers your tuition, two meals and the cocktail party, that we would like to see a number of our physicians go; and if some of them want to provide their travel expenses, we think it would be a legitimate activity from our budget to pay their stipend for them to attend that meeting, and the Committee made that as a recommendation.

That is the end of our report, and I think this last item, I will move that that be endorsed.

PRESIDENT RHODES: Do I hear a second to that motion that we endorse the payment of $25 registration fee for five of our members at this Congress on Public Affairs in January?

(The motion was seconded by Dr. Thomas L. Murphy.)

PRESIDENT RHODES: The three officials, of course. Do I hear any discussion? If not, so many as favor the motion let it be known by saying "Aye"; opposed "No."

(The motion was carried.)

Before we go any further, Ed, with your report, I would like to take this opportunity to recognize Dr. Rachel Davis, who has represented us so faithfully and effectively in our last two sessions of the General Assembly, and I would like to ask Dr. Davis is she has any comments she would like to make, and I would be very grateful to you if you would come up and have a seat here.

DR. RACHEL DAVIS: It has been good to have worked with you and for you in the General Assembly, and my plans are now not to do it again. I have been away from the Medical Society for six sessions, and this is one of the reasons that I am not going to continue to be a member of the legislature. My purpose here this morning—at the suggestion of some of my good friends—is that I come up and catch up on the fine work that this Society has done since I have been doing other things.

Thank you. I have no other comments. I think Dr. Beddingfield's report is apt and very good.

PRESIDENT RHODES: Thank you, Dr. Rachel; we are proud to have you here.

DR. BEDDINGFIELD: I am about through. I would certainly like to add the words of the Legislative Committee about the very fine rapport and support that this Society enjoyed from Dr. Davis; and in the interest of time, I skipped over some of the activities of the Legislative Committee.

I might speak for just a moment and say this, to remind all of you that these are the Kerr-Mills (SB 8) benefits that will be available according to the legislation that was passed. First of all, the enabling legislation that was passed is broad, overall enabling piece of legislation that will enable the Department of Public Welfare and the State to offer whatever scope of benefit seems to demand priority at the time, without requiring new legislation. However, the specific appropriations bill (S 423), which was a companion bill, was specifically earmarked for certain programs or benefits, and these are as follows:

The groups to be benefited from these programs are not only your medically indigent, over sixty-five, but also your totally indigent, those now on the Old Age Assistance rolls over sixty-five, as well as your medically indigent and indigent of the permanently and totally disabled group, and your dependent children group. The following programs or benefits will be available: Hospitalization, which is and has been available to all these groups for some time now; secondly, an out-patient prescription type drug program will be available to all of these groups across the board. The third thing is the out-patient diagnostic benefit of X-ray and laboratory examinations which will be uniformly available, and dental benefits, a dental program that will be available to the indigent and medically indigent over sixty-five. There will be no dental program for those under the age of sixty-five.

I cannot tell you, for example, in the drug program whether there will be a formulary published, whether there will be a limitation as to what type of drugs will be prescribed. These are the type of details that are now being worked out within the Department of Public Welfare, but that information will be available in specific detail, so that you can use it with your patients as soon as it becomes available to us.

MR. JOHN H. ANDERSON: Examinations in doctors' offices available for medically indigent, over sixty-five.

DR. BEDDINGFIELD: The diagnostic part, that's right.

PRESIDENT RHODES: Thank you, Ed.

I would like to observe right here that the Society owes Ed Beddingfield and John Kernodle, and Jim Barnes, and many other people, a real debt of gratitude for the fine work they did in this last General Assembly. They were devoted. They spent a tremendous amount of time, and as Ed has pointed out, they accomplished what they set out to do.

DR. PASCHAL: I move it be approved.

(The motion was seconded by Dr. Ralph B. Garrison.)

PRESIDENT RHODES: It has been moved and seconded that the report on legislative activities be approved. Any discussion or questions? If not, so many as favor the motion make it known by saying "Aye";—

Now we move back to the report of the Committee on Finance. I will ask Dr. Benton if he will take over at this point.

DR. WAYNE J. BENTON: Mr. President, the budget is being handed out to you for the calendar year of 1964, starting January.

Excess of receipts over expenditures is $7,945, instead of $10,445.

It is the policy of the Finance Committee, any chairman of the Committee who sends in a request for funds, we give them that without any question. We did that because we were afraid that if we started cutting, automatically, if it looked too high to us, the next time they would send a request they would put in twice as much. We didn't want to establish that policy.

There were a few that we cut out, and I do want to report it to you, and I think it is a matter of policy and the Council ought to pass on it.

It has not been customary for any of the Committee chairmen to have a dinner or cocktail party at the meeting annually, semi-annually, or any that they have. We had a few requests for funds, so that they could buy dinner for members of the various committees when they had worked all day. Because that had not been customary in the past, we denied it. We felt that if that got to be universal, the cost would be prohibitive. That if every committee in the Society was allowed funds to have a dinner when they have a meeting, why, it would get out of hand.

Where we got a request for under $60, we did not feel it was feasible to set up a separate budget for a small amount like that, and we asked that committee chairman that if he needed $60, why, he could get it out of the emergency and contingency fund, rather than set up a separate budget for a small amount.

A problem came up in reference to some of the travel expenses. It has been customary in the past that where a committee has had to go out of state, and the president or the Council asked them to go, they have paid their travel expenses; but at no time have they paid them travel expenses within the state. The Finance Committee thinks it ought to continue that way. We have always had somebody willing to pay their own way in intrastate travel, their own telephone calls. It might be necessary, in certain isolated instances, to make exceptions to that rule. For instance, just as an example, your president-elect is getting to be more and more active in the field, and he is called on more and more to do things, and perhaps past president-elects have not done so.

Would you as a Council favor paying his in-state expenses, and his telephone calls? Would you favor putting up an expense account for your president-elect? I would like to know what you think, or would you rather leave it just as it has in the past, where we pay his out-of-state expenses, and he pays his own in-state expenses? Does anybody want to speak about that?

PRESIDENT RHODES: Do I hear any comment on that point?

DR. KERNODLE: Mr. Chairman, I would like to speak on that point. Having passed through the gauntlet of commissioners, president-elect and president, if an individual spends as much time as he is required to as a commissioner with many committees meeting here and there, and if the president-elect is as active as we are getting to be in this state—more and more activity in public relations and community activities—it is an expensive proposition. I think the Finance Committee should include—and I would like to make a motion that they consider and include in the budget an expense account for the commissioners and the president-elect, and they can come to some basis as to that, leave it to their discretion.

(The motion was seconded by Dr. Sams.)

DR. BENTON: All expenses, or out-of-state expenses?

DR. KERNODLE: I make the motion that the Finance Committee set up an expense account for them, for operations in and out of the state. It is at your discretion to start out with, and it is to be utilized accordingly. I think it is very imperative—I made this statement at the last meeting in Asheville, and one of the reasons I asked for an increase in dues is that I think these meetings are taking more and more time of the individuals. It becomes rather expensive, it becomes rather time-consuming, and I believe there are many individuals who would not fulfill their jobs because of the expense from time to time. Some of us would probably go right ahead and do that, but I feel it is something that should be included in the budget.

PRESIDENT RHODES: Any further discussion?

I think I can vouch for the fact that certainly the president-elect does spend a good bit of time attending meetings, both in and out of North Carolina, and it is a burden on time as well as on finances.

I hadn't given much thought to the commissioners, but if they attend all the committee meetings that occur, and that they are expected to do, that would involve considerable time and expense.

DR. BENTON: You mean that for the 1965 budget, not the 1964. Don't make us go back through this one.

DR. KERNODLE: For future objectives, Wayne.

PRESIDENT RHODES: Is that understood? It would not affect the present budget we are considering; it would affect future budgets.

Any further discussion? If not, so many as favor the motion let it be known by saying "Aye"; opposed? So ordered.

DR. BENTON: Now I want to draw your attention to a minor detail that has already been taken care of. In case your wives don't know about it, we have been printing in the Journal each year the transactions of the Auxiliary, and it comes to some $1100 for these pages of the Auxiliary that come in the Medical Journal out of our pockets, and not even shown in Auxiliary expense, and I haven't found anybody that has read it. It doesn't get home to the Auxiliary, so they don't get to see it. So it just looks like $1100 thrown away.

I asked Mrs. Reece about it last night, and she said that they have no desire for it at all. So I am instructing Jim in the future not to include the Auxiliary transactions in the Journal.

MR. JAMES T. BARNES: It will be in the current issue.

PRESIDENT RHODES: Already out this year.

DR. BENTON: This will be the last one.

PRESIDENT RHODES: Do you want a motion on that?

DR. BENTON: If it is necessary. That is the reason I talked to the President last night, and she said it is perfectly all right with them.

DR. PASCHAL: I was going to inquire about the records. These are put on file, and they are in the files of the Auxiliary, and in the files of the State Medical Society.

MR. BARNES: It now becomes a part of the bound archives volumes.

DR. PASCHAL: So whether it appears in the Journal or not, it will still be a matter of record.

PRESIDENT RHODES: That is right.

DR. PASCHAL: Retained for posterity.

DR. BRIDGER: I make a motion to delete it from the Journal.

(The motion was seconded by Dr. Sams.)

PRESIDENT RHODES: Any discussion? So many as are in favor of the motion let it be known by saying "Aye"; opposed "No." So ordered.

DR. BENTON: While we are on the Auxiliary, let us look at an allotment of $2500 in D-3, Woman's Auxiliary and Archives.

The Woman's Auxiliary gets $1800 of that $2500, and Roscoe McMillan's Archives gets the rest of it. So it is a little misleading here.

While you are looking at this, why should we have to supplement the Auxiliary in any way? We think the Auxiliary ought to raise their own dues to pay their own expenses and keep their own budget, and this be deleted completely from our budget.

I again talked to the President of the Auxiliary last night, and she is in favor of that, except that some members of the Auxiliary feel that they cannot raise raise their dues. If they raise their dues, they won't get the membership; but to leave it as it has always been. It hasn't been changed any since it has been organized. With a little help from us, a recommendation from us, she said they probably could get them to raise their own dues, and they will get no money from us, which is really the proper way.

PRESIDENT RHODES: Could you tell us, Wayne, how much raise in dues this would involve?

DR. BENTON: Let them work it out. I suggest to do one or two things: Let them paddle their own boat, or take over the whole thing and make it ours for investment and everything else. It is getting so in the Auxiliary that they have to come for a handout every once in a while. It is embarrassing for them, and their operation is getting large enough that they ought to raise their own dues to take care of their own activities, and delete everything from our budget. $1800 is not nearly enough.

I move that this Council recommend to the Auxiliary that they raise their dues sufficient to carry on their own expense account.

PRESIDENT RHODES: Do I hear a second to that motion?

DR. PASCHAL: I second the motion, and I would also like to inquire of our Council if these monies that are spent by the wives of the doctors, which in effect are spent by the doctors themselves are not a deductible item from a tax standpoint? I am inclined to believe that it is, and I think that would influence our consideration some.

DR. HARRY L. JOHNSON: Is the Auxiliary organized as an eleemosynary institution?

PRESIDENT RHODES: Yes, it is, because it supports certain philanthropic activities.

DR. BEDDINGFIELD: I would like to raise another question about this, if I could. I understand that the maintenance of their membership list is perhaps more of a problem with the Auxiliary than it is with the Society. Perhaps the motivation for a doctor's wife to be active in the Auxiliary is not quite as great as the motivation for a doctor to maintain good membership in this Society. I think that the successful operation of a

strong Auxiliary is a valuable adjunct to the Society, and I wonder if the possibility of a dues raise might tend to make that problem even more acute of maintenance of an adequate membership roster of an auxiliary. It may or may not. I simply raise that consideration.

DR. BENTON: That is what they were afraid of.

DR. KERNODLE: I would like to speak to the same point. I already questioned the tax problem, and I am not sure if we get that payment up too high that that is tax deductible. John says it is. Nevertheless that is one point. I think they would lose members, and we need all the members we can get in the Auxiliary. I think if we can keep their dues at a low level—it is coming from the same source; we are paying it this way, and it is the old story; as long as you are paying part of the cost of operations, you have a little more liaison with them than if they become separated to the point where they were paying their own way. They won't ask as many questions in some instances. I think it is better to have a little financial string tied to them.

DR. BENTON: They are going to have a full-time secretary and put her in the office and keep the connections that way, with the increased funds.

DR. BRIDGER: What are the dues?

DR. BENTON: $2.50.

MRS. JOHN C. REECE: Mr. President, by virtue of my office as President, I have no authority, without consultation with my Executive Committee. I think the remarks that Dr. Benton has made have been purely thinking between both of us and his aproach to me. I told him that I would be glad to take this up with the Executive Committee of the Auxiliary and express the thinking of perhaps this group in regard to financial assistance.

The reason that we came to you for assistance in the beginning, which was only a matter of some four or five years ago, was to help us at the convention with convention expenses. It gets to be a little embarrassing to physicians' wives whom we are trying to entertain at medical conventions, to have to bargain with florists, bargain with merchants in the community, and what-not, for assistance at a bargain price.

So it was, I think, four or five years ago that we asked the Society to help us with convention expenses. At that time, you gave us $500.

Then as our activities have grown, we have also asked for assistance in secretarial aid. That is aid to the President in the community in which she lives, and that aid had amounted to approximately $600 a year. That is not a full-time girl; that is used otherwise to supplement the convention expenses that have been running more than $500. Then the other $300 was $100, an allotment for the President, and the President-Elect to attend the AMA Convention in Atlantic City, which is in October, the fall conference. So that is the way the $1400 has been broken down that you have been giving us.

Now the question of a raise in dues was brought up three years ago at the Executive Committee meeting, and it was voted down entirely due to the fact—and it has been stated by some of you here—that we want to maintain the interest of our 2414 members that we had and try to get it increased. At that time, we could not even begin to think of raising our dues.

In years to come, if we can project this thing, in time maybe we will be able to raise our dues certainly to take care of our own needs, and to paddle our own canoe; but I don't think we can assume that we can suddenly do that. It is going to take maybe two or three years in order to do that.

Dr. McMillan asked for a $400 increase this year in assistance to the Auxiliary. Now whether or not you want to go along with that is up for decision for you to make. It will be used wisely in the operation of our finances, but as Dr. Kernodle has stated, it does come out of the same pocket; and if we can, in time, do it, I think that the Auxiliary would be happy to, but it is going to take a matter of education and thinking, and I will be glad to present it to the Finance Committee next May in Greensboro when it meets. But as President, I cannot assume that we will just up and do it.

PRESIDENT RHODES: Thank you, Madame.

DR. BENTON: That is for the future.

DR. KERNODLE: I would like to make a substitute motion that we defer any action in this area until further decisions are made by the Auxiliary in regard to their ability to raise the dues.

DR. BENTON: All I ask is that we encourage them to do this. We are not trying to tell them to do it right now. This is already in the 1964 budget. This is for next year.

PRESIDENT RHODES: Any second to Dr. Kernodle's substitute motion?

(The motion was seconded by Dr. Johnson.)

DR. PASCHAL: What are the current dues?

MRS. REECE: Two dollars and fifty cents state plus any additional dues that the counties set. I think they average from eight to twelve dollars additional dues.

DR. GARRISON: Mr. Chairman, we have got more than 2500 members of doctors in the state here. It amounts to one dollar per member, and I don't think we should wrangle too much about the one dollar we give them, because in the Auxiliary there are any number of doctors' widows who are in there, and some of them are members in the Auxiliary, and their income could be limited. It would work maybe more of a hardship on them than it would by any dues increase that we might have to make in the Society to have it.

I don't think we should divorce the Auxiliary

from the Society and go on and pay it what it requires. It is all coming out of the same pocket.

PRESIDENT RHODES: It comes out of the same pocket, but some of these girls might have trouble getting that extra allowance, don't you think?

Any further discussion of the substitute motion? If not, so many as favor the substitute motion make it known by saying "Aye"; opposed "No." So ordered.

DR. BENTON: Another item I have here is scientific membership. We have been charging them half price, and the Finance Committee does not see why—they have every privilege that we have, except for the banquet, and the banquet is paid for by itself, and no funds from our budget go into the banquet. I move that the scientific members be charged the same dues as we pay.

(The motion was seconded by several, Dr. Sams, and Dr. Johnson included.)

PRESIDENT RHODES: Motion made and seconded that scientific members be assessed the same dues as active members in the Society.

MR. BARNES: Of course, that means that this will have to go to the House of Delegates for action, because it cannot be imposed until there is an affirmative action of the House of Delegates.

DR. BENTON: We have to recommend it to the House of Delegates.

MR. BARNES: It cannot go into effect until the January following ratification by the House of Delegates.

PRESIDENT RHODES: Any further discussion? If not, so many as favor the motion let it be known by saying "Aye"; opposed "No." So ordered.

DR. BENTON: As I understand it right now, as far as the budget is concerned, I move the adoption of the budget as presented to you at this time.

(The motion was seconded by Dr. T. S. Raiford.)

PRESIDENT RHODES: You have heard the motion that the budget be adopted as presented. Any discussion? Any questions?

There are no exceptions.

So many as favor the motion let it be known by saying "Aye"; opposed "No." So ordered.

DR. BENTON: I would like to report on our investments. We now have in our open end mutual fund a total of $132,142. That represents a growth since 1959 from almost $100,000 we put in originally.

MR. BARNES: Progressively. Some of it hasn't been in there that period.

DR. BENTON: It is now increased to $132,142, September, 1963.

That works out about 7 per cent interest on our invested money. That does not include this final quarter, the third quarter of this year, which is usually the big one. To give you an idea of how much it is, the third quarter of 1962 was $4602; third quarter, 1961, $1005; March, 1963, $1041; June, 1963, $1133.

So it is coming right along, and we are proud of this.

DR. KERNODLE: Mr. Chairman, I would like to ask Dr. Benton, what was our low ebb on our fund when the market went down to its lowest point? Do you have that with you?

MR. BARNES: It went down to 10.26 asset value per share and is now calculated on 11.84. So it has gone back from 10.26 to 11.84.

DR. BENTON: Percentage-wise it didn't go down nearly as much as the Dow Jones did.

MR. BARNES: We bought the bulk of this at 10.18 asset value.

DR. WILLIAM F. HOLLISTER: May I ask what fund this is?

MR. BARNES: Investors Mutual.

DR. BENTON: We have had some inquiries about the purchase of our property. One offer was that 6 per cent interest on what we have invested in property. The Finance Committee was not interested in that. Another gentleman approached us and wanted to buy some property at our price to put a warehouse on, and we have asked Jim—I am asking him now, to have him to talk to counsel, to approach him and tell him that we will build the building for him and lease it to him, and see if he is willing to negotiate in that way. If he is, and if the price is right, then we will want to get counsel, and he gets a permit from the Internal Revenue people for us to do that.

MR. BARNES: Of course, the tendered proposition is to purchase outright for a figure of $60,000, a tract.

DR. BENTON: Our Committee says we are not interested in that.

MR. BARNES: He knows nothing about any counter-proposal.

I wouldn't want to make any counter-proposal.

DR. BENTON: This is a suggestion.

PRESIDENT RHODES: Do we need any action on this?

PRESIDENT RHODES: Don't we need an expression from the Council to authorize you to proceed with that?

DR. KERNODLE: Mr. Chairman, I would like to express a very strong sentiment in this respect. If we get into the money-making business, we are going to jeopardize our position, and I am not so sure that our counsel will follow through on this completely.

(Discussion off the record.)

PRESIDENT RHODES: Do I hear a motion on this issue, so that we have something to discuss?

DR. KERNODLE: I move that we not involve ourselves in the building of rental property.

(The motion was seconded by Dr. Fred E. Patterson.)

DR. BENTON: Mr. President, obviously your Finance Committee is not going to do anything that the Council doesn't want us to do, but when this question came up, I wish you would look at

your Constitution and By-laws—it says that the Finance Committee shall have sole custody of the funds and property. I believe it is out of order to tell us what to do with the money.

DR. KERNODLE: I would like to discuss that and say that the Finance Committee has function over funds and activities, but they have to listen to any recommendation or action passed by this body as a policy-making body. I realized that, and I was going to say that before you brought it to us. We can tell you you cannot do something, and you cannot do it according to the Constitution.

PRESIDENT RHODES: Any further discussion? John, do you have any further comment on this?

MR. ANDERSON: Only that I cannot guarantee what the Internal Revenue Service is going to look into any time you ask them a question. I wouldn't attempt to. I outline the possibilities. Whether or not income from the Journal and net income over and above expenses of the convention and exhibitors is unrelated income might pose a serious question. It might not. We have thought it is not unrelated income, because it relates directly to your primary objective of the Society, which is education and scientific betterment.

But I wouldn't advise going to Washington on any proposition that would lead to suspicion that there is other taxable income of the Society and get into an argument.

Now we are not a trade association, but that is the only classification under the Internal Revenue laws we could come under, whether we like that connotation as that, as all other medical societies.

If the proposition is worthwhile enough to go to Washington and get a ruling, then you could contract at that time.

PRESIDENT RHODES: Any further discussion? If not, we will have a hand vote on this one. All in favor of the motion will make it known by raising their right hand.

DR. STYRON: The motion is carried on the counted vote.

DR. BENTON: I think this is the final item that I have. It is just to remind you that 30 per cent of the total budget is produced by the Headquarters Staff effort. This is equivalent to the cost of the Executive Budget, devoid of salary and expense of public relations, and salary and expense heretofore carried in rural health budget, neither of which contribute markedly to the revenue producing efforts of the Headquarters Staff. Our Headquarters Staff is doing a really good job for us.

PRESIDENT RHODES: I think they should be commended, because that certainly is a good report.

What will we do with Dr. Benton's report, move it be accepted as a whole?

(Such motion was regularly made and duly seconded by Dr. Kernodle.)

PRESIDENT RHODES: It has been moved and seconded that we approve the report. Any discussion? So many as favor the motion let it be known by saying "Aye"; opposed "No." So ordered.

It is our privilege and pleasure now to hear the report of our President of the Auxiliary, and I am going to ask Dr. Charles Styron and Dr. John Reece if they will escort Mrs. Reece to the front.

MRS. JOHN C. REECE: It certainly is a pleasure to meet with the Council of the Medical Society today and present this report to you. It is a real joy and a privilege to serve as President of the Medical Auxiliary.

If you will bear with me while I give this report to you, which I promise will be very brief. I think that I shall prefer to read it.

It has been said that as a physician's wife is his helpmate, she is likewise his community envoy and representative. To her rightfully belongs leadership in health, education and community service.

Before us now is a whole new year of service in the Auxiliary to the Medical Society of the State of North Carolina. As individual physician wives and as a united Auxiliary we have entered it willingly, enthusiastically, dedicated to tell the story of the physician and his wife through service.

We have a membership of 2414 members with 8 counties and 100 per cent membership, Watauga, Scotland, Anson, Onslow, Catawba, Chowan-Perquimans, Union, Stanly. Our aim, of course, is to interest every physician's wife in becoming a member, so that united together we may continue to interpret the aims of the medical profession to other organizations interested in the promotion of health education; assist you in the entertainment at the meetings of the Medical Society, promote friendliness among the families of the medical profession, and do such work as may be approved from time to time by the Advisory Committee appointed by the Medical Society.

This year we are striving for a 20 per cent increase in membership, 482 new members. Within our ten districts we hope to recruit 48 new members from each one. Please help by spreading this word around to your wife if she is not a member and to your colleagues' wives in your communities.

We have grown to a significant group of great potential power and influence. Not alone, for you, our physician husbands, have furnished the tools, provided the blueprint, have guided our hands and encouraged us to great endeavors. We have not worked to reach this position for our own advantage but for yours.

Together with you we are partners in medicine, forming a partnership of dedicated service to others. If the public is to believe that we are partners in a dedicated service to others, then as physicians'

wives we must be undivided from you and we must present a strong, united membership.

Dr. Leonard W. Larson, a Past President of the AMA, told physicians' wives during his term in office that the role of the wife of today's busy doctor is like sitting in a cat-bird seat—"a position of great prominence or advantage" according to Webster. Most of us think of this term as the picturesque tall chair on which the judge sits at a tennis match with a full view of all the action, and from this point, he can see and evaluate what is happening. Most of you do rely on your wives more than men in other endeavors. Since medicine is a service field, and those in service fields have a way of becoming public property, physicians' wives are often required to extend themselves in public relations to a far greater degree than the wives of other men.

So through the years of marriage to physicians we have, from a cat-bird seat, had the opportunity to become public relations experts. To present honest and diplomatic answers when questioned by patients and the lay public, to see two sides to an issue, to be fair and objective, to maintain a steady interest in local, state and national affairs, demonstrating that at all times we are sincerely concerned over all aspects of public welfare—this has been our range of viewpoint.

It has been said that the road to success of man is lined with women pushing. We know that you, our busy physician husbands, depend upon us to do a lot of pushing in health, education, and community service projects. To hear that doctors want us to do this will start us on a difficult job and keep us at it until it is finished. To be needed by those we love and admire is all we need to know. Through all the services we render to our communities we are striving to enrich the dedicated services you, the doctors, give.

The Auxiliary, through its program, tries to guide and teach the individual member to be a wiser citizen, a more helpful neighbor, a better working member of the groups in which she serves her community, and most of all present the true picture of the physician and his wife in partnership through service. We are striving to imprint more than ever this year this true picture in this State by reaching far into orbit, to each city, town, and village, with good competent services by Auxiliary members. We hope to win many friends for medicine.

There are 17 projects promoted by our Auxiliary. While not all projects are engaged in or promoted in every Auxiliary, the coverage throughout the State is excellent and yearly reports attest to this fact.

Special emphasis and encouragement this year is being placed upon Health Careers. We are cooperating with the Health Career Program of North Carolina and their coordinators. We are, among our own Auxiliaries, compiling a list of nursing scholarships, loans, and other Health Careers loans that are sponsored by many Auxiliaries, making this information available to your Society and to the Health Careers program.

We are continuing to support our Student Loan Fund with contributions. Ten students have applied for assistance since 1955, four for $500, six for $1000. One $500 loan has been repaid, four are in the process of being repaid, five are still outstanding. We have a balance of $4,171.96 in the account and we are looking for worthy individuals who need financial aid in their junior and senior years of their study and training in medicine, postgraduate nursing and allied fields of graduate study.

We will be assisting you in the promotion of AMERF, a priority project. This expression of concern for the financial needs of the medical colleges and students, interns and residents from us in the profession by private support is an absolute necessity if medical education is to remain at its present high level.

WA/SAMA will receive special attention this year. These future Auxiliary members will be encouraged to attend our meetings gaining their first knowledge of organized medicine. We will offer them our assistance, interest and friendliness as physicians' wives.

International Health Activities will be stressed with one aspect of the work being the promotion of hospitality to foreign students and foreign doctors studying in our schools. Project Hope information will be spread and medical supplies, sample drugs and used medical textbooks will continue to be collected and shipped.

Along with a continued program on safety in everything and seat belts in ever year, a program on Gun Safety will be emphasized. Special information has been given to the Safety Chairman in each county for a real promotion on Gun Safety.

Mental Health along with your program will emphasize the Suicide Prevention Program. The film, "The Cry for Help," was shown at our Fall Conference and perhaps county medical societies will be interested in having the Auxiliaries assist them with the showing and presentation of this film.

Community Service Projects will be stressed in each community. This list is too long to report, but health examinations, immunizations, science fairs, driver training courses, recreation, physical fitness, school dropouts, delinquency, baby sitting courses, guidance programs, homemaker services, rural health, Golden Age clubs, health drives, United Fund drives, Red Cross training courses, Civil Defense, cultural groups, civic groups, church work and many others will be participated in by physicians' wives.

Last but not least in our program we shall continue to preserve the finest form of medicine in the world today. With Thomas Huxley we agree

"That it is not who is right but rather what is right that is important." We believe that the program of medicine that you, the physicians in North Carolina, promote is right and important for the citizens of our State.

This, then, is the program of the Auxiliary to the Medical Society of the State of North Carolina for the year 1963-'64. As President it is a joy and honored privilege to serve so many fine wives of physicians. They are being encouraged to work more seriously than ever in their Auxiliaries as an individual member, as a member of the Auxiliary team, as your community envoy, and to have fun doing it. With the assistance given to us by the Medical Society we shall strive to operate efficiently in the state and county levels, prepare ourselves to speak for medicine with knowledge and conviction through programs and from professional concern for the welfare of the community through Service to Others.

(The Council members rose and applauded.)

PRESIDENT RHODES: I want you to know how much we appreciate all these activities, that under your leadership the Auxiliary will add lustre to this profession. We know now why John Reece was a good president.

What shall we do with the report of the President of the Auxiliary?

(It was regularly moved by Dr. Paschal that the report be accepted.)

DR. JOHNSON: With our appreciation, second the motion.

PRESIDENT RHODES: It has been moved and seconded that we accept the report with appreciation. So many as are in favor, let it be known by saying "Aye"; opposed? So ordered.

I am going to digress slightly now from the prepared agenda.

Dr. Fleming Fuller one of our Commissioners, is not completely well today, and we feel that we ought to do him the courtesy of allowing him to make his report at this time, so that he may not be held up unduly.

So, Fleming, would you come forward now and make your report please? We appreciate your stick-to-itiveness to come up here and do this when we know you are not feeling well.

DR. H. FLEMING FULLER: I hope this is something that you will listen to with a few actions you will have to take.

The Report on the Committee on Legislation I believe Dr. Beddingfield gave.

DR. BEDDINGFIELD: I have already done that.

DR. FULLER: I will brief this as much as I possibly can, and we will pause only for those things that we need action on.

The Committee Liaison to the North Carolina Pharmacy Association plans to communicate with the pharmaceutical group and request a joint meeting to be held looking toward a discussion of topics of mutual interest and concern to both groups. The Committee also expect an interest in reviewing as information the administrative details of the North Carolina Kerr-Mills Law as it concerns provisions for drug benefits.

This is respectfully submitted, James P. Hendrix. No action needed.

The Medical Legal Committee, within the past year, has worked jointly with the Committee of the North Carolina Bar Association in the revision of the Medico-Legal Code of North Carolina. Copies are available on request from the State Society Headquarters office.

The Committee is planning to arrange a joint meeting of the comparable committee of the North Carolina Bar Association for a discussion of matters of mutual interest.

The chairman plans to communicate by letter, at an early date, with County Medical Society presidents urging consideration of a periodic joint meeting between the legal and medical groups at the local level.

Respectfully submitted, Julius Howell, Chairman.

The Committee on Public Relations plans to continue its projects of an annual exhibit at the North Carolina State Fair; its support of the High School Science Fair, and the practice of giving complimentary subscriptions to the AMA magazine entitled Today's Health to the governor, the Council of State, members of the State Legislature, as well as to the Supreme and Superior Court Judges.

The Committee plans to revitalize its efforts to encourage County Medical Societies to hold medical press get-togethers at the local level in the interest of improved mutual understanding. The Committee plans to develop and disseminate recommended ground rules for conducting such meetings and also offer assistance to the local group in the organization of such sessions.

The Committee is ready to go to press with the "Information Booklet for Physicians" which will be henceforth distributed to all new members when they join the Society. In addition, as soon as the booklet is off the press, a copy will be sent to each County Medical Society offering a copy to present members upon request to the Headquarters office.

This is one of the finest things we, as a Committee, reviewed. Each of us who sat in at the Committee meeting would like to have a copy and I would like each of you to see a copy of this and take one home, if you like.

We didn't feel we could give it to every member of the Society (from this printing), but those who want it, after seeing the one sent to the County Medical Society, may write and get that.

The Committee wants to particularly remind the members of the Executive Council that the Annual Conference of County Medical Society officers and committeemen is being planned for Saturday, January 25, 1964, and respectfully urges that each of

you encourage the County Societies in your area to send representatives. Complete program details to be distributed in the near future.

I am going to ask Bill Hilliard to present the Committee Advisory to North Carolina Highway Patrol on Traffic Safety—to present this when Major Speed is here this afternoon. (We recommend this activity.)

The Committee on Rural Health recommends that the physicians of North Carolina be urged to take a more active part in activities at a local level which will show the physician as a citizen as well as a doctor.

The Committee recommends that the Society continue to send one State 4-H Club health winner to Chicago.

The Committee, and those of you who have been active in this—Dr. Rhodes, Dr. Reece, and so on. in the past—probably one of the finest public relations things that we do in our state, notwithstanding all the others, this is a wonderful thing which the Committee heartily recommends be continued.

In conjunction with the recommendations of the Highway Safety Committee to the Council, the Committee recommends:

(a) Preparing standards of physical fitness for automobile drivers;

(b) Studying the factors leading to death and destruction on the highways;

(c) Reporting recommendations to the Motor Vehicles Division.

The Committee recommends cooperation with the School Health Committee in a concerted effort toward tuberculosis control by carrying out recommendations contained in a report of "Governor's Advisory Committee on Tuberculosis" particularly, with reference to skin testing of those entering the first grade and in the ninth grade.

Respectfully submitted, Edward Boyette, Chairman.

The Committee Advisory to North Carolina Association of Medical Assistance reports that on April 27, 1963, a State Association of the American Association of Medical Assistance was organized at a meeting in Charlotte, a proposed Constitution and By-laws adopted, and temporary officers elected. Following that meeting, a request for a letter of approval from the Medical Society of the State of North Carolina, along with a copy of the Constitution and By-laws was sent to the State Medical Society office.

When official approval was obtained from the State Medical Society, application for membership in the American Association of Medical Assistance was submitted.

Following confirmation of membership for NCAMA in the AAMA, a meeting was held at Presbyterian Hospital, Charlotte, of representatives from Cabarrus County Medical Assistance Association, Gaston Medical Assistance Association, and the Charlotte Medical Assistance Association, at which time regular officers for the year were elected. An executive board meeting is planned for the near future, following which a report will be made.

Respectfully submitted, John Brabson, Chairman.

In the absence of the Chairman, President John F. Rhodes presided at the meeting of the Committee on Hospital and Professional Relations and Liaison to North Carolina Hospital Association.

Problems concerning a situation in Spruce Pines were dicsussed in detail and later developments reviewed. After considerable discussion, the Committee, on motion of Dr. Jones and seconded by Dr. Parrott, requested that the President of the Society proceed in any manner that he sees fit, working toward a resolution of the Spruce Pines problem.

The circumstances surrounding an alleged overutilization situation in a particular area of the State was discussed in the light of certain statistical data available. On motion of Dr. Wright, seconded by Dr. Worth, the Committee recommended that the chairman of this committee be empowered and charged to communicate with the Chiefs of Staff at the hospitals of the area involved and request their confirmation or contradiction and explanation of the alleged overutilization of health insurance.

The questions of efforts of certain health insurors to obtain through litigation the blanket right to review any and all records of a medical character on any of their insureds was presented and discussed as information. No action was taken.

PRESIDENT RHODES: Now as to the Spruce Pine situation, I would like to acquaint the Council with this briefly. This we have come to know is a very involved issue. I had my first information about it in a letter of August 16 from Dr. John Horner, which stated that during seven years and nine months that the Spruce Pine Community Hospital—since it had been opened—there had developed a serious problem in relationships between the undersigned, Dr. Horner, and the administrative and governing staff of the local and the governing staff of the Spruce Pines Hospital. He requested in this letter that the Society aid him in resolving this issue.

My reply to him at that time, not knowing anything that had gone on before, was that it was my feeling that such an issue was within the purview of the staff of the hospital, and that when the staff of the hospital had exhausted every resource to resolve the issue, then on request of the staff it would be the prerogative of the Medical Society to refer this to its Committee on Hospital and Professional Relations. That was my reply to his letter, and that was the first information I had about this issue.

I subsequently discovered that this matter had previously been brought to the Committee on

Hospital and Professional Relations in the Fall of 1962; that during the course of its investigations, the doctor had resigned from the staff, and that within about thirty days of the time he resigned, he was reinstated, having signed certain agreements with the Board of Trustees. Following that, he had requested the Committee to discontinue its investigation, that the matter had been settled satisfactorily, and that it was our understanding that this was a temporary settlement of six months' duration.

I then discussed this with Dr. Theodore Mees, who is Chairman of our Committee, with our attorney, with Dr. Raiford, whom I discovered had been invited, along with Dr. James Raper, who was the representative of the committee who had investigated this originally—Dr. Raper and Dr. Raiford had been invited by the Board of Trustees to attend a meeting. My letter had come on the 16th of August. They had been invited to attend a meeting of the Board of Trustees of the hospital on August 13 to consider this difficulty. Dr. Horner was not present at this meeting. He was represented by attorneys.

Dr. Raper and Dr. Raiford persuaded the Board to defer action, which they did for one week. Actually, they deferred action for two weeks, because of some illness of the family of one of the members of the Board, and the next meeting took place on the 26th of August. It was at that meeting that Dr. Horner's privileges at the hospital were suspended.

Two days later, I had a second letter from Dr. Horner requesting that the Medical Society use all of its resources, including legal counsel, to support him in his complaint against the Board of Trustees of the hospital. Following this, a conversation with Dr. Raiford by phone informed me that Dr. Horner had secured an injunction against the Board of Trustes of the hospital to permit him to continue to treat his patients in the hospital, and that a hearing date had been set as of September 16, before Judge Huskins.

This hearing was held and was continued for a period of twenty days, which would bring the next hearing to the 5th of October. On the 16th of September, I received a letter from Dr. David Philips who is the chief of staff of the Spruce Pines Community Hospital, stating that he wanted to inform me that a motion had been passed (a motion introduced by Dr. Horner at the staff meeting), stating that the staff requested that Dr. Raper, Dr. Raiford and Dr. Cadmus, review this situation and present recommendations as to its resolution.

I responded to Dr. Phillips' letter explaining to him that certainly if this thing could be settled without court action, that that would be desirable, and I believe at this point I am going to ask Dr. Raiford if he will fill in some of the gaps here with what information he has at hand.

DR. RAIFORD: Mr. President, I will try to give you the chronology of this as briefly as possible, and then fill in details only in answer to questions.

In March of 1961, there was a request submitted to Dr. Raper as the local representative of this Committee to sit in with the Board meeting because of a complaint against Dr. Horner for using other than M. D. assistants at surgical proceedings.

(Discussion off the record.)

The Committee has recommended that the President pursue any avenue of approach to this to try to bring about a compromise.

PRESIDENT RHODES: I will entertain a motion as to whether we accept the recommendation of the Committee or whether we change it.

DR. KERNODLE: I move we accept the recommendation of the Committee and that the President proceed with rapidity with regard to action.

DR. FULLER: Request that the President of the Society proceed in any manner that he sees fit working toward a resolution of the Spruce Pines problem. That is the recommendation of the Committee.

(The motion was duly seconded.)

PRESIDENT RHODES: All those in favor of the motion let it be known by saying "Aye"; opposed "No." It is carried.

DR. FULLER: Another very hard-working committee, the Insurance Industry Liaison Committee, desires to advise the Society that the Claim Review Service, which was authorized by this Council and the House of Delegates, has completed the final format of organization for the Claim Review Service, and that a booklet describing its function, objectives, rules and regulations, has been distributed to the Society membership.

The North Carolina Claim Review Service is now functioning in accordance with these objectives and operating procedures.

We sincerely believe that this service will not only be in the public interest, but will be, as time goes on, of increasing import to the membership.

As far as the Committee is aware, this is the only insurance claim review facility in the country that is bilateral in function, in that company practices are subject to review by the insurance section of the Claim Review Service.

It should be reiterated here that any Society member who is aware of health insurance company practices not in the public interest should submit documented single cases for review to the Claim Review Service.

Respectfully submitted, Frank Jones.

That completes my Commission Report, with the exception of the one that I am going to ask Bill Hilliard to present when Major Speed is here this afternoon.

PRESIDENT RHODES: What shall we do with the report?

DR. SAMS: I move it be received and approved.

(The motion was seconded by Dr. Garrison.)

PRESIDENT RHODES: Discussion or question?

DR. BEDDINGFIELD: Two minor things. In the brochure of the information booklet for physicians, I believe the distribution of this is to be new licensees in North Carolina, rather than new members of the Society, with the hope that this will stimulate members in the Society. It goes to people newly registered in North Carolina.

MR. HILLIARD: That would be a cost prohibitive item. The reason it is new members only is because a lot of the people who are licensed never intend to practice in the State.

DR. BEDDINGFIELD: The introductory letter says "For physicians just beginning their practice," and it welcomes them to the medical profession.

MR. HILLIARD: That letter was written at a time when we were considering that, and we hoped maybe the Board of Medical Examiners would take this book or buy enough of them to do that; but I don't think we would have enough money to furnish unlimited copies.

DR. BEDDINGFIELD: I believe the Board of Examiners expressed an interest in doing just that, to give it to new licensees, and I think it would be good if we would let them know that this is available now.

DR. THURSTON: They could incorporate that in the register when they print the register. It would go to everybody every two years.

DR. BEDDINGFIELD: It might be a good idea any way they can get it out.

The other item I am sure Mr. Hilliard is aware of, the sheet in here pertaining to death certificates —I realize it is a preliminary draft dated in January of 1963. This is changed by virtue of the legislation we discussed a few minutes ago. It is obsolete.

PRESIDENT RHODES: By virtue of new law.

Any further discussion?

There is one other committee under this Commission that we must hear from, and then I have one other item I want to bring up momentarily.

I will ask Dr. Kernodle to present the report of the Association of Professions.

DR. KERNODLE: The Association of Professions was organized last September and chartered in January. We have six members appointed by Dr. Rhodes to be on the Board of Directors. The organization of this program was set up to the point that each parent organization would have six directors, and we have had that representation.

During the last six months, at several of the quarterly meetings and meetings of the Executive Committee, it has been recommended that we now proceed to have individual membership in the Association, and with that in mind I bring it to you today asking your sanction that we proceed as a part of this program to obtain individual membership.

Now individual membership will carry with it a five dollar annual assesment of dues. It is hoped that that would strengthen the program and give some impetus for its Legislative Affairs Committee and Division, and the more members that we can muster in this program, it would be more beneficial in this area.

I move that the Council recommend to its Directors in this organization that they proceed with individual membership campaigns in conjunction with the other parent organizations.

PRESIDENT RHODES: Do I hear a second to the motion?

DR. BEDDINGFIELD: Second.

PRESIDENT RHODES: Discussion of this particular motion? If not, so many as favor the motion make it known by saying "Aye"; opposed "No." Carried.

There is one other item before we come to the acceptance and the approval of the report of the Commission on Public Relations, and I want to remind you that in the report of the Committee on Hospital and Professional Relations, there was a recommendation regarding the matter of utilization in an area in North Carolina, and it was recommended that the Committee Chairman contact the chiefs of staff of the several hospitals in this area regarding this matter of overutilization, which is documented.

I have discussed this with the Chairman of the Committee this morning by phone, and he has agreed that he would carry out the recommendation, if approved, by the Council.

I believe we come to the acceptance and approval of the Report of the Commission, which we started before, with the one exception of the Advisory Committee to the North Carolina Highway Patrol on Safety. With that one exception, approval of this report as presented by Dr. Fuller is in order.

(Such motion was made by Dr. Kernodle and seconded by Dr. Patterson.)

PRESIDENT RHODES: Any discussion? If not, so many as are in favor of the motion say "Aye"; opposed? Carried.

We are grateful to you, Dr. Fuller, for waiting for it.

I would like to take just a moment to present our new Education Assistant to the Headquarters Staff, Miss Kay Zeigler. I will ask her if she will stand. She has assumed the position held by Mrs. Annette Boutwell, who resigned after the meeting in Asheville.

We are so happy to have you.

Now we move back to the Advisory Study Commission.

Dr. Poteat is anxious to get away, so I am going to ask him if he will present his report.

DR. HUBERT M. POTEAT, JR.: The Advisory and Study Commission Report is as follows:

The Committee Advisory to Auxiliary and Archives of History—you have heard the report already of Mrs. Reece, and I will not repeat that information.

The Committe on MEDICARE reports a satisfactory program, made no suggestions of changes, and recommended renewal of the contracts from October 1963 to October 1964.

PRESIDENT RHODES: We need action on that point.

DR. POTEAT: Yes.

PRESIDENT RHODES: Do I hear a motion?

(A motion was regularly made by Dr. Johnson, seconded by Dr. Reece, that this be approved.)

PRESIDENT RHODES: It has been moved and seconded that we approve this part of the report. It recommends renewal of the contracts, October 1963 to October 1964.

So many as favor the motion, if there is no discussion, let it be known by saying "Aye"; opposed "No." So ordered.

DR. POTEAT: A.M.E.R.F. Committee, Dr. Underwood is continuing its efforts to get doctors to make donations for medical education through this committee.

The Industrial Commission reports progress.

Blue Shield: Dr. Bradford is Chairman of this Committee. The fee schedule and certain details are cleared with the Insurance Commissioner and plans to implement the new high option, $6000 family income limit program as approved by the House of Delegates in May, becomes effective the first day of November, 1963.

That is information, and I don't believe requires any action, Mr. President.

One of the most active and energetic committees in this Commission is the Student AMA Committee, and I think it deserves a great deal of credit, because they are making a considerable amount of progress in an area where progress is needed.

Dr. Billy Peete and Dr. R. A. Ross both are quite interested in this program and have noted that in view of the recent Federal Legislation providing funds for building medical schools, and also for student loans—they feel that medicine will be in keener competition for qualified students to go to medical school.

They make two recommendations: First, they recommend the appointment of a standing committee on medical student recruitment, in view of these expanded medical facilities that are anticipated; and second, recommends consideration of a Society indoctrination class for new physicians similar to what Dr. Beddingfield was just talking about, to acquaint them with the socio-political aims of organized medicine, ethics, and the business and legal aspects of private practice.

PRESIDENT RHODES: We will take these separately.

First, recommends that a standing committee on medical students recruitment be appointed. Do I hear a motion that this be approved?

(Such motion was made by Dr. Bivens and seconded by Dr. Johnson.)

PRESIDENT RHODES: I might just make a point here. We have a Committee on Health Careers which encompasses this, it seems to me, because we have been trying to reduce the number of committees. Our organization is pretty top-heavy. We cut the committees this year from sixty down to fifty, by virtue of being able to consolidate certain committees, and there were several that were practically non-functioning. That would be my attitude about it, if we could encompass this in an already existing committee, it would be better. I would like to hear some discussion.

DR. JOHNSON: I make that as a substitute motion.

(The substitute motion was seconded by Dr. Raiford.)

PRESIDENT RHODES: Motion made and seconded that we assign this function to one of the existing committees—or we could specifically say to the Committee on Health Careers.

DR. JOHNSON: That is what I intended.

PRESIDENT RHODES: Any further discussion? If not, those in favor of the substitute motion make it known by saying "Aye"; opposed? So ordered.

DR. POTEAT: I think that would be entirely acceptable to the Committee.

PRESIDENT RHODES: Thank you.

The second recommendation was that the Society establish an indoctrination class for new members.

MR. BARNES: Would the SAMA Committee do that, or would the Public Relations Committee do that?

DR. POTEAT: The Committee did not make a recommendation in that respect.

PRESIDENT RHODES: The Public Relations Committee has made considerable effort in this area in the past, I know, with more or less success. Do I hear a motion on this recommendation?

DR. BENTON: I move it be referred to the Public Relations Committee.

(The motion was seconded by Dr. Patterson.)

PRESIDENT RHODES: Any further discussion? If not, so many as favor the motion make it known by saying "Aye"; opposed "No." So ordered.

DR. POTEAT: The Committee on Relative Value Schedule makes the following statement: In view of apparently insurmountable problems of time, personnel and expense, the Committee voted to request permission of the California Medical Association to adopt the California Relative Value Schedule for us in North Carolina.

PRESIDENT RHODES: I attended this meeting, and I might comment briefly about it.

They became entangled in overlapping programs

within the specialties that were diverted in their attitudes, and they finally decided that with certain exceptions, the California schedule was the best one that they had come up with.

The chief exception was that the Committee felt that the proposed North Carolina schedule for orthopedics, in that it divided or separated child and adult orthopedics, was preferable. I believe all other sections of the California schedule were felt to be acceptable and better than anything the Committee had been able to come up with. That is the situation.

Now what shall we do with their recommendation? The schedule would be based on a $150 appendectomy and would spread out from that level.

DR. BEDDINGFIELD: That would depend upon the unit value assigned; isn't that true?

PRESIDENT RHODES: It would depend on unit value, but the unit value would be determined by dividing the units into $150 for an appendectomy, and I believe the appendectomy was $40 under the most recently revised schedule.

DR. BEDDINGFIELD: I would like to raise a question. What would be the mechanics of handling, in view of the rather widespread dissemination of the present relative value fee schedule, particularly to units of government in North Carolina, vocational rehabilitation, and so forth, other state agencies—I wonder how we would recall or rescind the existing relative value schedule and resubmit the California schedule with a North Carolina label.

PRESIDENT RHODES: I think that would create some problem all right, and I believe the Committee feels that the dissemination of this schedule is somewhat premature. I believe that is the attitude of the Committee.

DR. POTEAT: That is correct, yes.

DR. BEDDINGFIELD: As a matter of fact, it has happened.

PRESIDENT RHODES: It has been done, I am sure.

MR. BARNES: They certainly authorized it.

DR. KERNODLE: Not only did they authorize it, but so did this Council at this meeting by accepting this Committee report, and that in turn was accepted by the House of Delegates by the action of the Executive Committee in the interim.

PRESIDENT RHODES: I would like to hear some discussion.

DR. KERNODLE: I speak to this from the point of view that we did prematurely accept this, and in all due respect to the Committee, they did a good job, but in many instances in formulating this first program, the schedules were set up identical with the California 1958 schedule, I believe it is, the first one, with default on the part of the specialties.

They got the information that they were supposed to review these figures but did nothing about it. So the Committee and its Chairman went right ahead and accepted those as the California version.

Now several of the specialties have gone over these and realize they have some discrepancy. That didn't only happen in North Carolina, because California has already issued their second Relative Value Schedule with changes.

PRESIDENT RHODES: Their 1960 Schedule.

DR. KERNODLE: They are talking again of a new one. So it is something that has not been entirely satisfactory in the initial state.

I think that if this is going to be recognized as our Relative Value Schedule, that we should certainly see that each one of the specialties involved has a chance to ratify its section, and that the point be brought back for any overlapping areas for a consideration by members from both specialties.

Now I bring up that point from the standpoint of surgeons and cardiovascular surgeons, and neurosurgeons—there are procedures that very according to the subspecialty. I think there is a lot of work to be done.

I am not making any motion and one has not been made, I don't believe.

The other thing is that immediately—and I would like to see this done—that we stop distributing the present Relative Value Scale until we decide, the Committee decides, what is the final action.

DR. RAIFORD: Mr. President, I bring up a point now.

There are certain individual practitioners of medicine who are requesting copies of the Relative Value Fee Schedule, because Vocational Rehabilitation, for instance, is paying on that basis, and the surgeon or the private practitioner of medicine does not know what fee to submit. Some of them don't have the Relative Value Scale, and he doesn't know what to put down, what to charge on these patients.

PRESIDENT RHODES: I think that is true.

DR. RAIFORD: It looks to me, as John has pointed out, that this, like anything else, any insurance schedule or anything else, is subject to revision every two, three or five years. As an alternate suggestion, wouldn't it be a good idea to continue with what we have now, with the understanding that based on perhaps California's new schedule, that in a year or two, or three, that we revise ours, and those are going to have to be brought uptodate, just like a telephone book, and say "Well now, this one supersedes the previous one you have. Throw that one away."

DR. KERNODLE: No, it doesn't have to be brought up. Once you set a relative value, unless you consider today a cardiac operation as a very high-priced reasonable thing, maybe ten years from now it will be compared closer to an appendectomy; that may come back in. Ninety-five to ninety-eight per cent of the procedures, once set, will remain there from now on, if everyone in

the group understands it and reviews it and knows about it. That is the fallacy. That was reviewed completely when it was published.

DR. RAIFORD: My point is simply this: It takes a lot of trial and error before you can get that schedule of relative values which will persist from now on, and it is going to take at least one, two or three revisions before we get it. Wouldn't it be better to go ahead with what we have now, with the understanding that when these little differences are ironed out, we attempt to improve them?

DR. HOLLISTER: May I point out another factor that is extremely important when considering these Relative Value Schedules. As far as the great majority of physicians in the North Carolina Medical Society, this whole program is in a state of complete and utter confusion. Most of them don't know what the Relative Value Schedule is, and furthermore they don't know how it is to be utilized if they understood it.

I think if we are going to continue to utilize it and revise it, that we are going to have to put on an educational program in some fashion or another. To my knowledge, the only people that are using it is Vocational Rehabilitation, on the basis of making their charges, their fees, and that is the reason that a few physicians are requesting it. Even then, they don't know how to utilize it.

I think that is a big problem that we are faced with. I can personally see little use for the Relative Value Schedule at the present time by the North Carolina Medical Society.

PRESIDENT RHODES: I would like to have a motion, so that we can get our discussion pinpointed.

DR. HOLLISTER: This is purely for discussion.

DR. BEDDINGFIELD: Let me report one thing for information that I think ought to be disseminated. Vocational Rehabilitation has assigned unit values. I don't know whether they are common knowledge or not, but they are as follows: Three dollars for medical services; three dollars for radiology; four dollars per unit for pathology; and two dollars per unit for surgery. They have published that.

PRESIDENT RHODES: That is correct.

DR. KERNODLE: I might add that the Negotiations Committee, which Bill Hollister chaired, was sitting in on this program when Rehabilitation —he didn't say that, but it had been utilized before they got into it. They had already set up (coefficient for) this schedule. I see Dr. James Donnelly in the back, who was in on that program with several other agencies trying to utilize the Relative Value Scale and it is being utilized by the insurance companies, both commercial and the Blues, right now to try to change some of their programs. So it is a very important factor that we do something about it to stop it, or else accept it.

DR. THURSTON: Then, too, the Industrial Commission is using it. They haven't revised their schedule since 1958, as Bill Hollister knows, and anything not in the schedule, John Norris uses this with the Industrial Commission to guide them in (values for) fees not covered specifically in the thing, and we hope that that will continue in that fashion.

PRESIDENT RHODES: There is no question that it has been utilized. Whether it has been utilized intelligently or not is the question. Ken, do you have a comment you would like to make?

MR. KENNETH BEESTON: I lived with that book twice since it was published, and they have innumerable modifications they have made as a committee; and then they found that it truly was not relative, specialty to specialty, or section to section. To make one up is essentially a vast fact-gathering project. That is the way California does it. They get charges from thousands of items and they put them in a computer, and they come out with this relative value. They just realized that they didn't have the personnel, the time and the money as a committee, to do this for the State of North Carolina. Besides, a reasonable book that was already in publication that had a lot of work in it was California's, and it would be expeditious to utilize that.

PRESIDENT RHODES: I believe it was brought out at the Committee meeting, too, that a good many other states had done the same thing, with minor modifications.

Do I have a motion on this point? Do you want to refer this back?

DR. KERNODLE: I will make a motion and get it on the floor for you, that this recommendation of the Committee be accepted with an addition to their recommendation that prior to final acceptance, the individual sections be ratified by the individual specialties, then re-evaluated in overlapping areas before publication of another edition.

(The motion was seconded by Dr. Hollister.)

PRESIDENT RHODES: Any further discussion of the motion? If there is no discussion, how many favor the motion? Opposed "No." So ordered.

MR. BARNES: In the interim, may I inquire about this published schedule? There was some discussion that no further copies be distributed. What about a pro edition on that?

DR. KERNODLE: I would move that the present supply be maintained in escrow and that no future distribution be made until further decision by the Committee, if they see fit.

(The motion was seconded by Dr. Sams.)

PRESIDENT RHODES: Any further discussion?

DR. RAIFORD: What are we going to tell the individual surgeon who wants to know what is the relative value schedule for Vocational Rehabilitation?

MR. BARNES: You have created a job now for

the Committee on Negotiations to go to these agencies.

DR. KERNODLE: They are running into a constant problem with them, and you are still meeting with them, aren't you, Bill?

DR. HOLLISTER: We meet whenever requested.

PRESIDENT RHODES: Any further discussion? If not, so many as favor the motion make it known by saying "Aye"; opposed—(Assumed to be carried).

There is one problem this creates, and that means that the office will have to make an explanation to every inquiry.

DR. BEDDINGFIELD: Even to individual members of the Society.

MR. BARNES: It would be easy to exclude without explanation outside third parties, but it would be rather difficult to go into a lecture correspondence explanation to every member who has been told in the Public Relations Bulletin he is entitled to this thing and told by the Rehabilitation Counselor Daily, "Get the schedule, and our fees are in accord with this scale of values."

DR. HOLLISTER: It seems to me that we have to stick by this one until a subsequent one can be produced, and I understood that was the way John's motion read.

DR. KERNODLE: The second motion was to put it in escrow.

PRESIDENT RHODES: That is, additional copies would be withheld. You would have to stand by the ones already in circulation.

DR. HOLLISTER: Take it out of escrow, and we are back where we started.

MR. BARNES: We could probably get a stereotyped letter.

DR. POTEAT: Could it not be—it is not my place to suggest—that the present Relative Value Scale Schedule that we now have, if the Committee just continue and go ahead with your first motion, which is to contact the various sections in a matter of revision—

PRESIDENT RHODES: They have done that.

DR. POTEAT: This thing is going to be revised from time to time, in a constant state of revision.

PRESIDENT RHODES: That is that Committee's contention. They have contacted the various specialties, and when they came up with their reports, they were not able to correlate them. That is where the problem arose.

DR. RAIFORD: Mr. President, wouldn't it be better then—and I make this in the form of a suggestion prior to making a motion—that we continue to disseminate the present Relative Value Scale Schedule, and to utilize it until such time as the Committee comes up with a more practical revision? Now I would make that as a motion.

PRESIDENT RHODES: That would be a substitute motion. Is there a second to that motion?

(The motion was seconded by Dr. Johnson.)

PRESIDENT RHODES: Does everybody understand that substitute motion?

DR. JOHNSON: May I add one remark? Would it not be entirely possible to send a letter, a mimeographed letter from the office, along with the copy that is being requested and sent to the individual member, that this program is under revision, and that many of the items are not entirely satisfactory to the Medical Society?

DR. RAIFORD: I will accept that as an amendment.

MR. BARNES: The communication to the doctor members—you wouldn't want to send that to third party agencies, and I would hope that you would put this "in escrow" on third party agencies.

DR. KERNODLE: That is what I was going to ask, Ted. Distribution only to doctors, and all third party requests be withheld.

MR. BARNES: Member doctors.

DR. JOHNSON: I accept that.

DR. PASCHAL: Just as a matter of parliamentary law, I think that this motion is out of order and what you would like to do to rescind the action.

DR. BEDDINGFIELD: A motion to reconsider.

DR. KERNODLE: I make a motion that we reconsider my original motion.

DR. PASCHAL: Then you can entertain a motion.

PRESIDENT RHODES: A motion made to reconsider the prior action.

(The motion was seconded by Dr. Hollister.)

PRESIDENT RHODES: Any further discussion? If not, all those in favor of the motion to reconsider the prior action will make it known by saying "Aye"; opposed "No." It is carried by a two-thirds vote.

Now the floor is open for a new motion.

DR. RAIFORD: I will make the motion that I stated, including Dr. Johnson's amendment and Dr. Kernodle's amendment concerning third party escrow.

(The motion was seconded by Dr. Johnson.)

PRESIDENT RHODES: Motion made and seconded that we continue the use of the present schedule, so far as our membership is concerned, with a covering letter to go out with each issue, until the Committee can come up with a revised schedule.

Any discussion of that motion? If not, those in favor of the motion say "Aye"; opposed "No." It is carried.

DR. POTEAT: Mr. President, may I ask that you recognize the Chairman of three committees who will make their reports directly, the Blue Shield Deputation to National Blue Shield, Dr. Raiford; Dr. Rachel Davis, the Committee Advisory to Marriage Counselling, and Dr. Roscoe McMillan, the Committee on Constitution and By-laws.

DR. R. D. McMILLAN: Mr. Chairman, members of the Executive Council: You know at the last

meeting in Asheville, the Society was thrown into rather a dilemma in regard to two of the men who were elected to the Nominating Committee. I wonder if the President wouldn't like to comment on that and make known exactly what happened, and I will take it up from there.

PRESIDENT RHODES: At a meeting of the House of Delegates on Sunday, May 5, the Nominating Committee Report was accepted and approved. Subsequent to that meeting, a caucus was held and a new Nominating Committee was elected.

Dr. Fleming Fuller, who was at that time serving as First Vice President, was sent out to the New Nominating Committee. Dr. William Hollister, who was sent out at that meeting of the House of Delegates as First Vice President, was also elected to the Nominating Committee.

This was brought to the attention of the President at a later date, and according to the By-laws no member may be elected to the Nominating Committee who, at the time of his election, is an officer of the Society.

That raised the question in my mind then when the new officers of the Society become officers of the Society, and when the old officers retired from their offices, because obviously one of these men was actually ineligible at the time of his election. Therefore, this brings up the question, which one of these men was ineligible?

I did not feel that in view of the service of these men to the Society that I was in a position to determine that, because of this question of when the new officers become operative. Therefore, I referred this to the Committee on Constitution and By-laws for clarification by the By-laws with a recommendation to the Council on this issue.

DR. McMILLAN: I will take it up from there on now.

The Constitution and By-laws Committee had a meeting on Thursday afternoon—most of the afternoon, to tell you the truth—and to bring you up-to date, on page 16 of the By-laws, Chapter V, election of officers, Section 2, "No member of this Committee at the time of his election shall hold any elective office in the Society."

What your Committee on Constitution and By-laws is recommending is to amend Chapter V, Section 2 in line 4 (what I read to you) by striking out the words "No member of this Committee at the time of his election shall hold any elective office in the Society," and insert in lieu thereof "No member who is an active officer or an officer-elect shall be a member of the Nominating Committee."

Second, Amend Chapter V, Section 3, by striking out at the end of Section 3 the period and adding "at which time the function of such Nominating Committee shall cease." That is to define exactly when the Nominating Committee, the old Nominating Committee's functions cease, and when a new Committee actually takes over.

Amend Chapter V, Section 3, by striking out at the end of Section 3 the period and adding "at which time the function of such Nominating Committee shall cease."

I will read you that section. "The report of the Nominating Committee and election of officers shall take place at the first meeting of the House of Delegates of the annual session, at which time the function of such Nominating Committee shall cease."

Now third, the Committee on Constitution and By-laws recommend the following: The Committee on Constitution and By-laws is of the opinion that Dr. Fleming Fuller was an officer of the Society at the time the members of the Nominating Committee were elected by the House of Delegates about five p.m., Sunday, May 5, 1963, and that he was therefore not eligible for election as a member of the Nominating Committee; that therefore, by reason of his ineligibility a vacancy exists on the Nominating Committee, which vacancy may be filled by the Executive Council, and that Dr. Fleming Fuller is now eligible for consideration for filling such vacancy.

Fourth, it is the opinion of the Committee on Constitution and By-laws that since Dr. William Hollister did not hold an office in the Society at the time he was elected as a member of the Nominating Committee, he was eligible to be a member of the Nominating Committee.

Mr. President, that ends my report.

DR. BEDDINGFIELD: May I ask Dr. McMillan, is there a definition of "active officer" anywhere in the Constitution? He used that term "an active officer." Is there a definition of an active officer? You may have an elective officer who is not active.

DR. PASCHAL: I think it would apply to his tenure of office.

MR. BARNES: That is what it has reference to.

PRESIDENT RHODES: The first part of this, Dr. McMillan, is the change in the By-law.

DR. McMILLAN: "No man who is an officer or officer-elect shall be a member of the Nominating Committee."

PRESIDENT RHODES: We don't need the word "active."

DR. KERNODLE: I move we accept the change in the By-laws. In fact, I move we accept all the recommendations.

(The motion was seconded by Dr. Sams.)

PRESIDENT RHODES: Do you want to vote on this all at one time?

DR. KERNODLE: It is all pertinent.

(The motion was again seconded by Dr. Sams.)

MR. BARNES: I might make a point that the Council has no authority to amend the Constitution and By-laws, only to recommend to the House of Delegates. You do have the authority on the other matters in this report.

PRESIDENT RHODES: We simply have to approve the report of the Committee on Constitution and By-laws.

DR. KERNODLE: I move that we recommend to the House of Delegates the changes recommended by the Committee on Constitution and By-laws.

DR. McMILLAN: Just one minute before you vote on that. I neglected to bring up one thing really not important, but it should be brought before the Executive Council.

There are several changes made in the By-laws, not really changes in the By-laws themselves, but by reason of some grammatical errors, and so forth, which were pointed out to us the other day. We accepted them, which doesn't mean any change at all in the By-laws, that is not in the substance, but it will sound a little better.

While I am on my feet, I would like to talk a little about the Constitution and By-laws for about two minutes. They need revision, complete revision from cover to cover. There have been so many changes, and none of them have been printed. I have a copy brought uptodate, but there is not a single member in the Society who has one brought uptodate, I am quite sure.

What I am really getting at, I am sure, is that there is so much in this thing that it needs editing. Not a member of the Society can look at the Constitution and By-laws and find out what he wants to find out right away. The fact is, I cannot do it myself. I know what is in it. As far as picking out and pointing things out to you, I don't know. I am sure I cannot do it.

The point I am coming to is this: We really need the Constitution and By-laws edited. A lot of this can be left out. I think it needs to be in there. The more I am a member of the Committee and the more I study it and have seen it, we are duplicating in the By-laws a lot of things in the Constitution. And if we just had the time and money to get somebody to help us edit this thing, it would be well worth money spent by the Society, I feel sure. I just want to point that out. No action to be taken.

PRESIDENT RHODES: We have a motion that we accept the recommendation of the Committee on Constitution and By-laws for the revision of the By-law affecting the election of the Nominating Committee and the time that it takes office. Do I hear any further discussion of this motion?

DR. BENTON: Is that for a change in the By-laws?

PRESIDENT RHODES: Yes.

DR. BENTON: To be done at the next meeting?

PRESIDENT RHODES: That is right. Any further discussion?

DR. RAIFORD: There are two or three things I would like to ask for clarification on. First, are we voting on all of your report?

PRESIDENT RHODES: No, just the first part which affects the change in the By-laws regarding the election of the Nominating Committee and the time at which it becomes effectives, takes office.

DR. RAIFORD: Would you state that again please, Dr. McMillan?

DR. McMILLAN: Amend Chapter V, Section 2 in line 4, by striking out the wording "No member of this Committee at the time of his election shall hold any elective office in the Society," and inserting in lieu thereof "No member who is an officer or an officer-elect shall be a member of the Nominating Committee."

You all understand why that was brought up, I am quite sure. If you remember a few years back, there were two members of the Nominating Committee who got themselves appointed to very important offices in the Society, which we felt was a mighty bad thing to do. We were trying to get around that part of it, and I feel if this is adopted, we would be in a much better position to fight that.

PRESIDENT RHODES: The second part of that motion is to amend, so that it would clarify the time at which the old Nominating Committee retired and the new Nominating Committee became active, and that would be at the end of its report and acceptance of that report by the House of Delegates.

DR. McMILLAN: That is right. Their function shall cease at that time.

PRESIDENT RHODES: That is the motion. Any further discussion? So many as favor the motion make it known by saying "Aye"; opposed "No." That recommendation is adopted for recommendation to the House of Delegates.

DR. KERNODLE: I make a motion that Dr. McMillan's Committee be authorized the job of revising and editing the Constitution and By-laws and utilizing financial assistance as needed. How much they will need, I cannot answer. I think you will have to run it on an open basis anyway. It needs to be done, period.

DR. PASCHAL: I would ask you to amend that to authorize them to do it, rather than to take it upon themselves.

(The motion was seconded by several.)

PRESIDENT RHODES: Any further discussion of this motion that the Committee on Constitution and By-laws be authorized to revise and edit the Constitution and By-laws?

PRESIDENT RHODES: Any further discussion? So many as favor the motion let it be known by saying "Aye"; opposed "No." It is carried.

We have one other item in their recommendation, and that is that we have a vacancy to fill on the Nominating Committee. What shall we do?

DR. WILLIAMS: Mr. President, I am Councilor for the Second District, and when this action was taken at our district caucus, we realized that Dr. Fleming Fuller was then an officer, but we thought his term expired, due to this lack of clarification in our By-laws, and we elected him a

member of the Nominating Committee at that caucus.

PRESIDENT RHODES: Let me clarify that by saying that according to the Constitution and By-laws, he was not eligible at the time of his election. We have ruled that. But he is now eligible, because he is not an officer of the Society, and this Council has the prerogative of electing a member of the Nominating Committee to fill that vacancy.

DR. WILLIAMS: Mr. President, I move that the Council elect Dr. Fuller to occupy that vacancy.

(The motion was then seconded by Dr. Raiford.)

PRESIDENT RHODES: Is there any discussion of that motion? So many as favor the motion will make it known by saying "Aye"; opposed "No." It is carried.

I felt that the Council ought to take action on that point, because of the question of the time of assumption of office.

DR. RAIFORD: We haven't disposed of Dr. Hollister yet.

DR. McMILLAN: Council would make this all right by accepting the report of the Constitution and By-laws Committee.

DR. RAIFORD: I move we adopt the report then.

(The motion was seconded by Dr. Garrison.)

PRESIDENT RHODES: So many as favor the motion to adopt the report of the Committee on Constitution and By-laws make it known by saying "Aye"; opposed "No." It is carried.

Dr. Davis, we will be glad to hear the report of your Committee at this time.

DR. RACHEL D. DAVIS: The Committee, the Advisory Committee on the question of Marriage Counseling, met last night and had a very interesting discussion.

The conclusions and recommendations were these: That it is evident from the court records, the Departments of Psychiatry, private psychiatric physicians, the physicians who practice psychiatry, and from domestic relations courts and from the increased number of divorce cases in the State, that there is a need in North Carolina for trained marriage counselors; that the subject of marriage counseling is teachable; that there are excellent source books, text books and brochures on the subject, and that there are trained people.

That there are two accredited schools in this nation, one is the Medical School of the University of Pennsylvania, which is part of the organized medical curriculum in the Department of Psychiatry; and the other is a school controlled by psychologists, the so-called Palmer Institute in Chicago.

The subject is researchable through medical and social agencies.

This Committee recommends that the North Carolina State Medical Society set up criteria for qualifications to be formulated for those who are to practice premarital and marital counseling; that we encourage the three medical schools to offer training in premarital and marital counseling to its senior medical students, and to its residents in psychiatry, and also to its residents in obstetrics and gynecology, and that these courses be opened to students from allied fields, that is, from the ministerial group and from the social workers.

Next, that the University of North Carolina be encouraged to establish a graduate training center in this field within the Department of Psychiatry at the University; that when the time arrives and we are ready, the concentrated program as a post-graduate course be given to the general medical profession in the State in the same manner in which the University now gives postgraduate education through its extension department.

Then the last recommendation is that this is a field that is being invaded by many people; that this is a field that belongs to many agencies, but this is a field in which the medical profession should assume its responsibility and should assume full leadership.

PRESIDENT RHODES: Thank you, Dr. Davis. What shall we do with the report of this Committee?

DR. BENTON: I move the acceptance.

(The motion was seconded by Dr. Bivens.)

PRESIDENT RHODES: It has been moved and seconded that we accept and approve this report. Any discussion?

DR. BEDDINGFIELD: Mr. President, I think that the aim of this Committee and its report is a very fine one, and we are certainly all aware of the magnitude of the problem—I am thinking about this in relationship to the problem that we have had with, for example, psychologists attempting to become certified in North Carolina, and I wonder if the first recommendation of the Committee regarding the establishment of educational criteria for marriage counselors—I wonder if this is a legitimate or desirable field for this Society to get into. Perhaps it is. I simply raise the question because that being approved by the Medical Society of the State of North Carolina, we could regret such a connotation at some time, depending on what area of activity such people got into.

DR. DAVIS: May I try to answer that?

There is an association of marriage counselors in this nation, a very limited association, because of the limited number who are qualified according to the criteria set up by this association.

The accredited schools of training also have criteria to be met, and therefore it is very limited—only two so far—and these criteria are set up by this Council.

This Council is made up of the medical profession and the allied professions—that is, the allied groups interested in this field, the ministry, and the psychologists and the sociologists. These people, in order to meet the requirements to become members of the American Association of Marriage

Counselors, have rigid criteria to meet, and we think that that is, within itself, adequate protection.

The fact is it requires training, an internship, and it requires constant progress in the field. They may, even in psychology, be an accredited marriage counselor, but this does not give them license, and would not give them license to practice without having the patient referred to them.

DR. BEDDINGFIELD: Mr. President, may I ask Dr. Davis then if there is already on a national scale a concept of accreditation both of the individual counselor in the school where we would need to set up criteria from this Society for approval of same?

DR. DAVIS: If the medical profession in this State is to offer leadership in this area in this State, then the first thing we have to do for this State is to set up criteria and standards of education and so forth. That is the first thing we have to do. Then we have to meet those as we unfold our program.

PRESIDENT RHODES: Any further discussion?

DR. KERNODLE: I was just going to make one comment. I realize too, as Dr. Beddingfield has pointed out, that this is a very treacherous area we are getting into with endorsement.

Recently, within the last two weeks, doctors approached me about the possibility of us doing just exactly this, and they were a little skeptical and worried, because the majority of people in the marriage counseling field were social workers and welfare workers, and it has gotten to be an organization, but I am not so sure whether we should put our endorsement on it without a real understanding of what we are endorsing. I think this puts us out on a limb.

PRESIDENT RHODES: Any further discussion? Would you like to make a substitute motion?

DR. DAVIS: May I make another remark before you do anything?

The Department of Psychiatry at the University of North Carolina—and as you know, it was suggested that this school, this center of training be set up at the University—was designated for several reasons. One, that it is a State-sponsored institution. Second, there are certain religious overtones which might bring pressures on those institutions and it is believed that the University's Department of Psychiatry is ready to expand in the areas of social psychiatry; that it, is the practical areas of living, as psychiatry applies itself.

This is not only in therapy, but in preventive medicine; and we believe that they are ready for this, and that this is a new service that they can inaugurate. May I suggest that before this Council takes a stand on this, if there is dissension, that this Committee be allowed to go to the University of North Carolina—we were asking you for the privilege of going first, and that we turn around and go to them and ask their thinking and help us to do more research and come back to you.

DR. SAMS: I make a motion that that be done, a substitute motion. That the matter be referred back to the Committee for further consideration and recommendation.

(The motion was seconded by Dr. Hollister.)

PRESIDENT RHODES: Any further discussion? As many as are in favor of that substitute motion let it be known by saying "Aye"; opposed "No." It is carried.

Ted, I believe you are the next one.

DR. RAIFORD: You will recall that in the written report submitted in the main meeting of the Council, there had been a meeting of the attorneys for Hospital Saving and Hospital Care, together with representatives of National Blue Cross and National Blue Shield, to explore further possibilities of merger between the two associations.

The meeting in October resulted in a feeling that there were no insoluble difficulties. No further activity has been carried out by this Committee. However, there has been a rather frequent exchange of letters between the Boards of Hospital Care and Hospital Saving during the past few months. Hospital Care has invited the Board of Hospital Saving, to meet with them for a full discussion of the entire problem, the primary point being, do we or do we not want a merger? The secondary point is, if we do, to explore the various points involved in it.

At present, the meeting has not been set up. Hospital Care has been quite anxious to have it. Hospital Saving has been less anxious to have it, but I believe now that within the near future, there will be a combined meeting of the two boards to explore the overall advisability, and that is where the matter stands, and your Committee is still standing by to help when called on. That is all.

PRESIDENT RHODES: Thank you, Dr. Raiford.

Is there any discussion of this Committee report? If not, we accept it as information.

There is one other item involved here. I am going to call a recess, and I will support this for the Commissioner after lunch.

(The meeting recessed at one-twenty o'clock.)

SUNDAY AFTERNOON SESSION

September 29, 1963

The meeting reconvened at two-thirty p.m., Dr. John S. Rhodes, President, presiding.

PRESIDENT RHODES: Under Dr. Poteat's Commission, there is still one other item, and I told him I would read this as the report of the Committee on History, a part of the Committee Advisory to the Auxiliary, and Archives of History.

This is under three parts. No. 1, the Chairman reported that many histories had been completed in a fine manner, and he enumerated a status report in all categories.

No. 2, Dr. Warner Wells, who is a member of the Committee—said he had responses from about half of the 120 questionnaires sent out regarding pioneer hospitals. He said that he had read the entire transactions of the Medical Society and strongly recommended that the Society obtain the services of a person trained in library science to index the transactions. He said that about two-thirds of the private hospitals were operated by physicians in private homes, and from 1869 were pioneering in application of the antiseptic principle.

No. 3 is the Committee agreed that their objective was publication in a bound volume and that a major job would be the final editing.

Now the only question at point here, it seems to me, is the question of the recommendation that a person trained in library science to index the transactions be secured.

Do I hear some discussion of this item? I gather that if they have only had responses from half of the questionnaires that there still is a great deal of material to be collected.

DR. REECE: We had a long discussion of that thing at the Committee meeting. I think maybe it should be investigated as to the cost of it.

DR. SAMS: I move it be sent back to the Committee for further study, and perhaps a recommendation as to cost.

PRESIDENT RHODES: Motion is made. Do I hear a second?

(The motion was seconded by Dr. Patterson.)

PRESIDENT RHODES: Any further discussion? So many as favor the motion make it known by saying "Aye"; opposed "No." It is carried.

Now then we come to the point of accepting and approving Dr. Poteat's Commission's Report.

DR. SAMS: I move that we accept and approve the report of Dr. Poteat.

(The motion was seconded by Dr. Beddingfield.)

PRESIDENT RHODES: Any discussion? So many as favor the motion let it be known by saying "Aye"; opposed "No." It is carried.

Now we go back to Dr. Fuller's Commission on Public Relations, an item which was deferred. I am going to ask Dr. Simmons Patrick, who is Chairman of the Committee Advisory on Highway Safety, to present his report and any guests he has to present to us.

DR. SIMMONS I. PATRICK: Mr. President and members of the Council: I have as my guest Major Chas. A. Speed from the State Highway Patrol Division, and Mr. Wade, and Mr. Peel.

Some time ago, Major Speed in the Department of Motor Vehicles requested of the Medical Society some help, and if I may I would like Major Speed at this time to present a problem which he presented to us, and at that time I would like to give you our answer if I may.

PRESIDENT RHODES: Without objection from the Council, we will proceed with hearing from Major Speed.

MAJOR CHARLES A. SPEED: Dr. Patrick, Mr. President and members of the Council: First, I would like to express the sincere appreciation of the North Carolina Department of Motor Vehicles to the North Carolina Medical Society for appointing a committee to work with us on related problems pertaining to highway safety as it relates to the medical profession.

We on the professional side of this thing sincerely believe that traffic violators today are diseased individuals. We believe they are a by-product of our complex, technical society, and as in dealing with any other disease, we believe that you have got to go to a specialist to have this person treated.

We have long felt that we are licensing many people to drive an automobile in North Carolina that are mentally and physically incompetent to drive. As you gentlemen increase the life span, we are also conscious that many people today, early in their driving career, are developing senile characteristics of behavior. I am not saying that age is a barrier to a driver's license. I will never say that. I am just saying with the high speed turnpikes, the limited access roads, the modern automobile, we are noting these things today more than ever, and our drivers' license examiners are having a real problem in trying to determine whether or not to license these people. To some extent, we can teach them the symptoms to be on the lookout for, but they are not of course competent to diagnose these people and to make an accurate statement as to whether or not they should drive.

In many instances today, we find it is advantageous both to the driver himself and to the driving public to issue restricted licenses, whereby the individual could drive only under certain circumstances.

We took these matters to Dr. Patrick and his Committee. They were most receptive, most cooperative and cordial. We discussed them thoroughly, and we have hit upon a plan that is being used successfully in other states whereby the North Carolina Medical Society, if it chooses, could render invaluable service to the North Carolina Department of Motor Vehicles by serving in an advisory capacity, in telling us what to do with these people. This is the immediate problem. A long-range answer, one we would like to work on with your cooperation, is to establish a pilot drivers license medical clinic at one of our State medical schools that would be staffed with research and medical personnel, equipped with the latest psychophysical testing devices, and we could refer these.

people that we have classified as accident and violator prone.

We could gather data regarding these types of drivers, and eventually I believe that throughout the nation we are going to have to have such clinics that we can refer driver's license problem people to, and let the medical authorities write us an authoritative report and tell us whether or not this person should be licensed, and if so under what conditions.

No longer can we go at it in a hit-and-miss method. We have been very elated and enthused over the possibility of working with Dr. Patrick and his Committee. He has done an outstanding job. He performed a great deal of research in corresponding with people in other states, and we hope with all of our hearts that it will be possible to put this plan into effect. Thank you.

DR. PATRICK: Mr. Chairman, the Committee Advisory to the North Carolina Highway Patrol Traffic Safety respectfully requests Executive Council approval to proceed with the development of a program of medical examination to determine physical fitness to drive a motor vehicle of certain North Carolina license holders.

The procedure would be for the State Division of Motor Vehicles License Examination to request the particular driver to have a physical examination by his family physician. The report of such examination would be sent to the Department of Motor Vehicles, and then reviewed by five unidentified physicians in a troop area on an individual basis. There are six troop areas in North Carolina.

The Department of Motor Vehicles would supply the reviewing physician with the background information which causes the Department to request the examination, along with a copy of the physical examination. Both pieces of information identified by number only. Then the final decision would rest with the Department of Motor Vehicles Operating License Bureau. The Licensing Bureau has promised that physicians reviewing such information will not be required (by them) to testify in court, should litigation in the case materialize.

The Committee proposes that this program be instigated by January 1, 1964.

I will be glad to answer any questions, and if I am not able to answer them, perhaps Major Speed can answer them.

PRESIDENT RHODES: You have heard Dr. Patrick's report; it is open for discussion.

DR. BEDDINGFIELD: How many members on your Committee, Dr. Patrick?

DR. PATRICK: Five.

DR. BEDDINGFIELD: Under this plan, you would need at least five in each troop area, a total of at least thirty on a panel.

DR. PATRICK: We would need thirty unidentified physicians. As far as this particular Committee is concerned, we are completely out of it, except to advise and try to run the program. Any decision within this Committee itself—there is none.

DR. MURPHY: Has the Committee thought about what physical standards should be met?

DR. PATRICK: We would propose to use the AMA standards, which they have published, and it may be that it may be necessary to modify those to some extent; but presently, we would use those as standards.

DR. BENTON: Send the form along with the patient to the physician?

DR. PATRICK: The Department of Motor Vehicles asks that this person be examined. Now if this person refuses to be examined, they can automatically remove his license, take his license, and revoke it. He can then take the examination to his family physician, and he has the examination. The family physician does not express an opinion as to whether or not this person is qualified to drive or not.

The report then goes to the Department of Motor Vehicles, who sends it to five unidentified physicians, and these cases are identified only by number, and the physician also knows why the Department of Motor Vehicles felt the examination should be done. It goes back, and the results are tabulated by the Department of Motor Vehicles. If there is a five to zero vote that this man should not be on the road, why this tells him pretty well what they should do. If it is three to two, maybe they might not take his license, or may restrict it in some way.

DR. RAIFORD: One question I would like to ask: Wouldn't it be better to have a physician other than his family physician do the examination?

DR. PATRICK: I don't think so. Some of the things that we might need to know about—

PRESIDENT RHODES: It seems to me that you don't want to by-pass the family physician in this, because he often has greater or more information about the patient than anyone else would have, his background.

I agree, as Ted has suggested, that it might, if the patient were turned down, have some implication as far as the family physician is concerned.

DR. PATRICK: The family physician is not making the decision.

DR. RAIFORD: Of course he isn't, but the decision is based on the results of this examination. If this man is turned down, he is going to take it out against the family doctor.

PRESIDENT RHODES: This is somewhat comparable to the present method of determining disability. And the purpose of having a separate review board in that case was to take the aegis off the family doctor, although the family doctor does make the examination.

MR. ANDERSON: I am informed the family doctor does it already now.

PRESIDENT RHODES: He is at the present time being asked to do that.

DR. PATRICK: But they get the information back, and they didn't know what to do with it.

PRESIDENT RHODES: Any further discussion?

DR. BEDDINGFIELD: I move the adoption and the approval of the report.

(The motion was seconded by Dr. Williams.)

PRESIDENT RHODES: Motion made and seconded that we adopt and approve the report. Do I hear any further discussion?

DR. PASCHAL: That would imply the implementation of it.

PRESIDENT RHODES: If we adopt his report, he said January 1, 1964, would be the date of implementation. As I understand it, it means also that this Committee will supervise the implementation.

Any further discussion? Would it require any new legislation?

DR. PATRICK: This will not require new leglislation. If you want to go into the program further and try to determine people we don't know about, then you have to get into new legislation. We are working within a legislative framework already. These are people that Mr. Peel and Major Speed know about. It is about twelve or fourteen hundred people a year on our highways in North Carolina, so they tell us, that they are concerned about, that fall into this group.

DR. KERNODLE: Let me ask one other question. Is there compensation from this examination coming from the patient initially to the family doctor at home? Does he get any pay from the patient?

DR. PATRICK: The responsibility of the physical examination of the patient is the family doctor.

DR. KERNODLE: What about the five men reviewing that?

DR. PATRICK: No compensation.

DR. KERNODLE: On disability, we have had a lot of problems where the family doctor gets no pay, and the consultant gets compensated according to the present method, and it is always an unhappy feeling on the part of the family physician when a third party pays the consultant but does not pay the initial examining party.

PRESIDENT RHODES: There would be no third party pay.

DR. PATRICK: None whatsoever. It is a patient's responsibility to pay his physician for having the examination done. Beyond that point, there is no compensation. The men who will be doing the reviewing will be doing it gratis to help the state.

PRESIDENT RHODES: I have no desire to stymie discussion. If there is no further discussion—

DR. WILLIAMS: Are we legally liable in any way, or is the physician—or are we involving ourselves in any way? I would like to hear that clarified again.

DR. PATRICK: We are told no.

DR. WILLIAMS: This would all operate within existing laws.

MAJOR SPEED: The decision as to whether or not the license is returned or revoked is with the Department of Motor Vehicles. They are using this to advise them in making their decision.

MR. E. R. PEEL (Motor Vehicles Department): At the present time, I am Director of the Drivers License Division. We send out at the present time questionnaires to ask a man to bring a report in from his family doctor. This takes the monkey off the family doctor's back, because the family doctor doesn't mind telling us what is wrong with the guy, but he doesn't want to make a recommendation as to whether to license the man or not. In this case, the same legal implication will exist as presently exists. In fact, it will not involve anybody. We are the ones to go to court. I assure you it never has involved the doctor and never will, I don't think.

PRESIDENT RHODES: The question has been called.

MR. WADE (Motor Vehicles Department): We had an attorney check into this question that you asked, and he advises us as to this.

PRESIDENT RHODES: We might ask one further thing, Mr. Anderson, if there is any comment you want to make on this.

MR. ANDERSON: I am not familiar with the section on which this proposal is to be carried on, except the section of the law that gives the Motor Vehicle Department the right to require evidence of ability to drive any time it has reason to question the driver's ability. I think that is generally the law.

MR. WADE: Chapter twenty-seven also authorizes the issuance—requires a man to obtain such a medical examination as we might require.

MR. ANDERSON: This is giving an advisory opinion, which would come from the five doctors on the panel in each area, and that would be in the nature of an opinion given an official agency of the State. Whether or not there is any provision for the Motor Vehicle Department calling on these five, I don't know. Is there anything in the law?

I think it would be inherent in the power of the Motor Vehicle Department to get any advice it wished.

MR. WADE: In the State of Florida, this is presently being done. I am sure—in fact I know they cleared this with their court all the way through, and they do the very same thing.

MR. ANDERSON: If a physician gives an opinion or makes a statement in connection with a legal proceeding, whatever he says is completely privileged as with any testimony in court, whether

it is right or wrong, and he would be immune from suit. I don't know whether such an opinion of the five doctors would be completely privileged or not, but I think it would be qualifiedly privileged, whether it is completely privileged or not—and I think the chances of him being held responsible are extremely remote. I don't think there would be any basis for a lawsuit against him in my opinion.

PRESIDENT RHODES: As many favor the motion say "Aye"; opposed "No." So ordered. Thank you, Dr. Patrick. Thank you, Major Speed and associates.

We go now to the Professional Service Commission. I will ask Dr. Paschal if he will give a report for his Commission.

DR. PASCHAL: Mr. Chairman, the first of these I will discuss is the Committee on Emergency Medical Service. The first recommendation that the Committee has to this body is that in order to conform with the name that is commonly used throughout the United States in most of the states—not all of them—that the Committee feels it would be of advantage to change the name of this Committee from that of the Emergency Medical Service and Military Affairs to the Committee on Disaster Medical Care.

This Committee is so named by the American Medical Association. It has been adopted by the majority of states, but there is still confusion in a number of states that have different nomenclature for this Committee.

There is some advantage in this, which I might point out, in that regions of the country are being encompassed in the future planning or in the planning now of disaster medical care. So that it involves a group of states rather than just the individual state, North Carolina, South Carolina, Tennessee—all of them have different names of their committees.

So it is the recommendation of this Committee that we change the name of this to the Medical Disaster Care Committee, the Committee on Disaster Medical Care, which would conform to that of the AMA and also a majority of the states.

In addition to that, it is sugested that the military affairs function of this Committee be retained and carried out as a subcommittee under the Committee of Disaster Medical Care.

I make a motion that recommendation to the Council.

PRESIDENT RHODES: May I have a second?

(The motion was seconded by Dr. Kernodle.)

PRESIDENT RHODES: Any discussion? So many as favor the adoption of the recommendation say "Aye"; opposed "No." It is carried.

DR. PASCHAL: You have recently had a questionnaire submitted to you regarding the transfer of authority of the custodial care of the 200-bed Civil Defense emergency hospitals. That was approved by a majority of the Council.

It was the feeling of this Committee that it would be well if a letter would be sent to the different county society presidents to let them know that these Civil Defense emergency hospitals are already pre-positioned, to let them know where they are pre-positioned, and to request them to do something about training and staffing the personnel for their operation. We make that as a recommendation.

In addition to this, we recommend that at the time the new officers are elected and committees are appointed, that the respective county society presidents, in turning in to the central offices a list of their officers and committees, that this be included, that this Committee be included, so that we can go forward with state-wide operation of this Disaster Medical Care group.

I don't think that these things actually require any official action on the part of the Council, since we have already been authorized to proceed with the functions of the Committee; but we would ask just the approval of the Council in proceeding along these lines, and it would necessitate the cooperation of the Executive Director and his staff in accomplishing this.

I move that the recommendation of the Committee in this regard be accepted and approved.

(The motion was seconded by Dr. Johnson.)

PRESIDENT RHODES: Any discussion? If not, so many as favor the motion will make it known by saying "Aye"; opposed "No." Carried.

DR. PASCHAL: It is proposed also that at the time of the Annual Convention we make an effort to have again on display one of the Civil Defense emergency hospitals, and this time it will be an abbreviated unit of the hospital, and we are hopeful to have that on display and have it manned.

We also want to try to do that at the time we have the Health Fair in Durham, and the Durham-Orange County people have proposed that they might man it and try to do a trial run at that time.

The other things that were considered by the Committee are more or less routine and don't require any action on the part of the Council. That concludes the report of the Committee on Emergency Medical Service, as it has been called.

The second is the Committee on Eye Care and Eye Bank. They met and discussed the action of last year's Committee, and the recommendations that were made. They wanted to make inquiry if anything had been done regarding the Executive Secretary writing to the companies who publish the telephone directories that had to do with the way they were listing the ophthalmologists in comparison to the optometrists regarding contact lenses.

MR. BARNES: I am sure that it has not been done, Mr. Chairman.

DR. PASCHAL: They wanted to make the request that that be done. I don't know what action you get, but anyway they did request that that be accomplished.

They have a recommendation that has to do with education, and this has to do with the educational program, especially, during the holiday season, for the purpose of informing children and their parents that bee-bee guns are weapons and not toys. They would like to have the support of the Medical Society in appealing to the population of the State through the various press media, and what sources we have, to make them aware of the danger and hazard of this particular type of gun, and other projectile toys.

MR. BARNES: I was under the impression that they are outlawed, bee-bee guns.

PRESIDENT RHODES: Maybe we had better go to this other item about writing to the telephone company. Perhaps we had better take some action on that. Could you restate that?

DR. PASCHAL: The reason for that was in most telephone directories, or in a number of telephone directories in which prospective patients are looking up where they can get contact lenses, the ophthalmologists are listed along with the optometrists, or in some instances just the optometrists are listed and not the ophthalmologists.

They want, as they requested last year, to have representation made through official channels of the Society to the printers of these directories to the effect that they would alter that, so that it would comply to read "Contact lenses, see eye physicians, opthalmologists." And then if you want to add optometrists. They thought that the optometrists under such listing were getting a favorable break and denying them patients that they should see.

PRESIDENT RHODES: Do I hear any discussion of that point? We could ask for it. Whether they would do it or not—

DR. PASCHAL: According to their consideration, they just want to have the letter written, and to see what can be done to accomplish that. They don't like the implication.

MR. BARNES: That would be to every telephone operating company that publishes.

DR. PASCHAL: In North Carolina.

DR. GARRISON: That space is paid for by the individual in the yellow pages, and you know good and well the company that prints the books is not going to do anything that is going to cut down the income.

DR. BENTON: Why do they want us to do it for them?

DR. PASCHAL: They thought it would carry considerably more weight than just coming from the Committee or Committee Chairman, or section of the Society.

PRESIDENT RHODES: Do I hear a motion?

DR. PASCHAL: I move that the letter be written. I think that it will satisfy the Committee.

(The motion was seconded by Dr. Bridger.)

PRESIDENT RHODES: No discussion? All those in favor of the motion say "Aye"; opposed "No." Carried. Proceed.

DR. PASCHAL: They would like to have the influence of the Society as a whole on the bee-bee thing.

DR. BEDDINGFIELD: I would move that the Public Relations Committee cooperate with the Eye Care Committee in the dissemination of such appropriate information concerning these weapons.

(The motion was seconded by Dr. Johnson.)

PRESIDENT RHODES: It has been moved and seconded. Any discussion?

MR. HILLIARD: I just want to make one observation. This has been done in the past and will be done again readily. I can work that out. Several years ago, Dr. Currie from Fayetteville got interested in this, wrote an article for the Journal, and we distributed it through the press media based on his article.

PRESIDENT RHODES: So many as approve the motion say "Aye"; opposed "No." All right.

DR. PASCHAL: Secondly, they propose a recommendation to the Council that representation may be made through the American Medical Association for assistance in getting an opthalmologist appointed to all boards of disability and retirement related to the Armed Forces where an eye problem is concerned.

It has come to their attention that at a number of these boards, they now have optometrists, or maybe no eye man, to consult with in reaching a consideration regarding the degree of disability of a member of the Armed Forces who is separated or retired. They thought it would be doing the individual member of the Armed Forces a service, as well as saving the taxpayer a considerable amount of money, if they had an ophthalmologist to consider this particular problem.

MR. BARNES: That would mean, of course, a resolution formally to the American Medical Association, and based on the experience we have had, we have had a little bit of difficulty getting a resolution that was originated and authorized in the Council rather than in the House of Delegates on the agenda of the American Medical Association.

I think there would be no difficulty if we acted on it in May at the House of Delegates and then got a resolution before the Annual Meeting of the AMA; but I just wonder what value it would have if we sent it as a resolution of the Council to the Clinical Session in December.

PRESIDENT RHODES: Couldn't we refer this back to the Committee with the suggestion that they draw up such a resolution to be presented at the May meeting of the Council and have the House of Delegates—

MR. BARNES: Approval of the principle of it.

DR. PASCHAL: I will go along with that. I pointed out that it would be necessary to go through channels, so to speak, in order to get this

accomplished, so that it would reach the proper committee to be directed to the National Health and Advisory Committee, which has to do with this sort of thing.

It is not just a matter of by-passing the House of Delegates of the AMA and writing directly to these people to get it accomplished.

DR. KERNODLE: Mr. President, I would like to ask Jim a question with regard to this. If we wait until May, we are going to have to rush pretty fast to get it on the agenda in June. It has to be there thirty days ahead of time.

The other question is if it is sent from Council now to the Fall meeting, maybe they will not accept it. They might. And if they didn't accept it, it would come back in May, and it will already be before them with a little touch of what we have in mind. It might be worthwhile if you are going to do it to do it in that manner rather than wait until May, because you would have to be cold talking it over with others.

DR. PASCHAL: May I suggest, Mr. Chairman, that I request the Chairman of this particular Committee to draft a resolution in conjunction with his other Committee members carrying out this idea, and that if it does not deviate from what I have proposed, that it be accepted by this Council and that it be forwarded on at this time, if that is agreeable.

PRESIDENT RHODES: Is that agreeable to the Council? Any objection?

DR. PASCHAL: If that is agreeable, I will make such a motion.

(The motion was seconded by Dr. Kernodle.)

PRESIDENT RHODES: Any further discussion? That would mean, I presume, that it would come back to the Council in January.

DR. KERNODLE: That would not get to you before the Fall meeting, which is in December.

DR. PASCHAL: I don't think that this is so terribly urgent, but I think that there will be some advantage to proceed with it.

DR. KERNODLE: It has come to my attention for the last several years I have been going about —any resolution that comes up as late as it comes up in May, except next June, it will be two years if you are going to wait until that time, or a year from now they might take it up to the Clinical Session.

I would think that it would be the power by this motion that you would go ahead with your resolution and we accept what you have made up to send in there.

PRESIDENT RHODES: It has been moved and seconded that the Commissioner be authorized to instruct the Committee to proceed with the resolution. Any further discussion? If not, so many as favor this motion make it known by saying "Aye"; opposed "No." Carried.

DR. PASCHAL: The other things they discussed were of a routine nature and require no action on the part of the Council. If they are interested in the deliberations of the Committee to a further degree, I will be glad to discuss other things that were considered.

Next the Committee on Insurance. The Committee on Insurances has one recommendation for the Councilors, and that is they ask the approval of the Council to send a letter over Dr. Joseph Hooper's signature to the members of the Society who do not have business, disability expense insurance, with the American Casualty Company.

Now the purpose for this is to increase participation under the provisions of this insurance policy, which the Society has approved. They want to expand the participation, and by doing that they hope to have additional subscribers. They make the request that that be done, and I move that that be approved.

(The motion was seconded by Dr. Raiford.)

PRESIDENT RHODES: As many as are in favor make it known by saying "Aye"; opposed "No." Carried.

DR. PASCHAL: There was a review of experience with professional liability insurance. They pointed out that it was about 11 per cent increase in participation within the Society. It was also pointed out that there was approximately a quarter of a million dollars now set aside in reserve for cases pending.

During the past year, or during this year, no monies have been paid out for any professional liability claims. There are a number of them that have been settled, and there are a number of them that are still pending. It is possible that at the meeting in January they will request the officers of the carriers of this insurance for a reduction of the current premium. I am not sure it will be granted, but in any event I am sure we will have some more information about that at a later date.

The next is the Committee of Physicians on Nursing. Most of what took place there was actually of a routine nature. I will be glad to discuss what they did and what they said, and so on, if you want me to. I don't believe there is anything that requires any action on the part of the Council, and with your permission I will forego detailed discussion of them.

Does anybody have any questions regarding the Phyisicans' Committee on Nursing?

PRESIDENT RHODES: There is one item that would come under that Committee which you may not be familiar with. That is the Committee on Nursing and Patient Care has requested—we have an appointee to that Committee, Dr. John McCain—a small stipend to support their mailing and secretarial activity from the organizations that make up that Committee on Patient and Nursing Care, and they have asked for $20 to $50 for the support of that program.

Now the major item involved this next year

would be a matter of reviewing the problem of hospital visitation with some sort of a correlated recommendation from the three groups, the hospitalization, nursing association, and the Medical Society, relating to hospital visitation. That is the major project, and they have requested that the Society appropriate the sum of $25 to $50 for that work.

DR. PASCHAL: Dr. McCain, who I believe heads that subcommittee, was not present yesterday, and that was not discussed. However, I am familiar with that. I had heard about it, and I move that the Society appropriate that amount of money for this. Not to exceed $50.

PRESIDENT RHODES: Do I hear a second to that motion?

(The motion was seconded by Dr. Hollister.)

PRESIDENT RHODES: All those who are in favor make it known by saying "Aye"; opposed "No." It is carried.

DR. PASCHAL: The Committe on Postgraduate Medical Study. They actually had very little to suggest, but they did make one suggestion to the Council. They want to encourage, again, the idea of having the North Carolina Specialty Groups meet with the sections of the Society at their State meetings. This has been brought up and discussed at previous meetings, and an effort has been made to accomplish it. But this Committe went on record as being in favor of continuation of trying to get that accomplished. Aside from that, I think they have nothing to add.

We had a meeting of the Committee on Health Careers, and they recommend active participation on the local and State level in conjunction with Career Days at the different high schools in the State. I don't think it requires any action on the part of this Council to do that. They do approve continued cooperation on the part of the Medical Society with the Health Careers of North Carolina.

Now they wanted Mr. Barnes to write a letter to the County Medical Society secretaries requesting that local liaison be established and designated to contact the Health Careers District Office in the areas in which this is going on. This is divided into six different districts in North Carolina. They are getting ready to actively function, and they want help from your office in writing this letter to encourage these people to participate. They want to send with that appropriate material, the little kit that is prepared by the Health Careers in North Carolina, which will give them information.

They wondered about the continuation of the Committee. They wondered if they actually had anything further to do, and might this not be carried out under some other committee.

However, the career program is on a three-year basis, and we have entered into it on a three-year basis. We have subscribed $500 a year for the three years, and since we are participating, have a member of the Board of Directors, it might be well to continue a committee if it is within the discretion of the President to work in conjunction with them.

I don't recommend any change in that.

Finally, the Retirement Savings Plan Committee has continued to work with its program and its plan. As you know, and as was reported to you earlier, the Wachovia has been chosen, after competitive bidding and so forth, to act as trustee for this particular plan, if and when it is put into operation. It is not certain that this plan will be available to the membership in 1963. It will be, if current legislation which has been introduced only in the past fortnight in Congress is approved. The rub comes now in the fact that any such trusteeship is considered by the SEC to be within the province of their jurisdiction. There is a difference of opinion between the SEC and the IRS, and it has not yet been resolved. Until that is resolved, there is no banking concern that is willing to accept trusteeship for these funds. Any action on that will just have a await clarification of that particular point.

DR. KERNODLE: Dr. Hollister, may I ask a question of George?

I talked with Dr. Caldwell about this, and he tells me that the $3000 fee would put us in business with Wachovia, but the fact is that that is going to be a pretty high penalty for us to pay.

The question I want to ask you is, what is the position of the AMA retirement program? Do you know what phase that is in?

DR. PASCHAL: I don't know.

DR. KERNODLE: I think they are about ready to release that, and they can absorb the $3000 that the SEC requires whereas our smaller participating group of 3000 people, we couldn't take care of it. That is the Wachovia Bank's thinking. We should realize if there is going to be a fund available, if they cannot get ours adopted, the AMA will have one available to members who want to participate.

DR. PASCHAL: I might want to point out that there are other funds in which the doctors can participate at this time. It is the feeling of this Committee that it is not advantageous to the physician, on a long-term basis, to enter into participation of these funds that are available now.

My understanding of the setting up of these funds under such an arrangement as is proposed here in North Carolina is that there wouldn't be any particular action taken until this matter is clarified, regarding the jurisdiction of the Securities and Exchange Commission.

PRESIDENT RHODES: Your recommendation then is that no action be taken on this.

DR. PASCHAL: I bring this to you for information. If Congress acts favorably on this, the Committee is prepared to bring the information to

the attention of each member of the State Society to give them the opportunity of participating in 1963. If not, they will have to wait until 1964 to get started.

If there are no questions regarding that, that concludes that Committee. It also concludes the Commission report, and I move the adoption and approval of the report as submitted.

(The motion was seconded by Dr. Raiford.)

PRESIDENT RHODES: It has been moved and seconded that the Professional Service Commission Report be accepted. Is there any further discussion of this? If not, all in favor say "Aye"; opposed "No." It is accepted.

We will move now to the Public Service Commission, Dr. Thurston.

DR. THOMAS G. THURSTON: Mr. Chairman, each of these Chairmen were present; each of these Committees met, with one exception; one Chairman was out-of-town on Committee business.

The first one that we would like to report is Anesthesia Study. There the Committee reviewed —they are studying anesthesia death, much as the Maternal Welfare people have done it. They have not been able to do it on as good a basis because of lack of budget and not having professional people carrying out the thing; but through the cooperation of the Health Department, they have reviewed the statistics and an effort to get more cooperation on this collection of statistics. They had about sixty deaths during the last year that they were reviewing. They were unable to get the material from the teaching hospitals, strangely enough, so that it is a matter of disseminating this information. Dr. Horace Baker, who is on the Commission, is going to take it up with the North Carolina surgical group meeting here next week, and they plan to have a page in the Journal, much as the Maternal Welfare people.

There is nothing that requires action of the Council. I just want to make you aware of that.

The second report is that of the Maternal Welfare and Health Committee. That was well attended. They had the heads of departments and people mainly concerned with the survey they have been making for the past few years on hospitals. The man who has done that, in cooperation with the different Ob-Gyn people around the State, has been Jim Donnelly of the North Carolina Board of Health, and I want Jim to tell you about the report and the conclusions.

DR. JAMES DONNELLY: This was a survey which was done at the request of a group of physicians who claimed that in their hospital, the facilities offered for obstetrics patients were considerably less than desired. This opinion was expressed by many other people at the meeting, and so a questionnaire was sent around the State and was handled largely on a regional basis with the regional members of the Committee selecting physicians in each hospital.

The response was exceedingly good; 71 per cent of the general hospitals responded. They included 78 per cent of the total number of beds involved.

The report, which has been submitted to the office over a year ago, is quite lengthy, and just to indicate some of the items that are in it, I selected a few. These questions were answered largly by physicians who were practicing in these hospitals. The administrators were also asked a set of questions. These represent the physicians' feelings about their own hospitals.

Labor suite was judged inadequate for the patient load in 21 per cent of the hospitals. It was inadequately equipped in 30 per cent. The nursery was inadequately equipped in 14 per cent.

In 19 per cent of the hospitals, no PM's were permitted to assume responsibility on a given time period for the labor and delivery suite. There was no separate premature nursery facilities in 59 per cent of the hospitals. There was no medical anesthesia available in 66 per cent. Anesthesia was given in 17 per cent of the hospitals by on-duty nurses. When there were anesthetists on call, 56 per cent of the hospitals indicated that these on call anesthetists were not in the hospital, that they would be outside the hospital or anywhere else.

Twenty per cent of the hospitals indicated no formal anesthetic service for OB. The physicians judged their anesthesia service to be inadequate in 41 per cent.

Referring now to blood facilities, which was one of our main interests, 39 per cent of the hospitals indicated that blood was not always available on a twenty-four hour basis. Sixty-two per cent said that it was inadequate on a twenty-four hour basis.

I hated to admit it in front of Dr. Thurston, but the X-ray questions were quite favorable, and they indicated that X-ray service and in general laboratory services were quite adequate. We had thirty pages of information, but these are just some of the highlights.

I think what the Committee is concerned about at this point is that there are many deficiencies, and we now, having done this, would like to move this on, and they are asking the Council to either assume responsibility for doing something about it, or accepting this report, or whatever they wish to do about it.

DR. THURSTON: We want to move to accept this report and refer it to the appropriate committee for action, of whatever you feel at this time.

PRESIDENT RHODES: Do you have a suggestion about the Committee?

DR. THURSTON: It is the feeling of the group there that since it involved nursing personnel, anesthesia, and other things, it might cross several committee lines, and whether you want it in rotation, or joint referral, we have no specific recommendation.

DR. DONNELLY: I think they felt that the

Hospital Association was strongly involved throughout this entire report. These are really hospital functions, and sooner or later some contact would have to be made with them.

DR. THURSTON: Hospital relations.

PRESIDENT RHODES: Is there a second to the motion that we accept this report?

(The motion was seconded by Dr. Hollister.)

PRESIDENT RHODES: Any further discussion?

If not, as many as are in favor of the recommendation of the Committee will make it known by saying "Aye"; opposed "No." Carried.

DR. THURSTON: The Committe on Cancer had the only comment that sigmoidoscopy be included in the routine procedure done in the Cancer detection clinics, and that some emphasis on this be put through the Journal. That has been done before, so it requires no action. They also plan to have a page in the Journal pointing up cancer problems.

There was some discussion of the problem of funds running out at the end of the year, the funds of the North Carolina Board of Health for Cancer, and there was no conclusion made on that. That is a continuing problem that has to be worked out each year between the Board of Health, the practicing physicians, and the Advisory Budget Commission. Last year, the Budget Commission made up this deficit. We had hoped that they would be urged to do so in the next year, and transfer this, since it is operating funds and operating deficit, from the B budget into the A budget, so that it would automatically be taken care of, rather than carried over as in each year.

There was no other particular discussion in the Cancer Committee.

PRESIDENT RHODES: Dr. Norton, do you have any comment on this?

DR. NORTON: No; that gives the picture, except that you said they had run out at the end of the year. They ran out about halfway through the year.

DR. THURSTON: And there is the problem we mentioned on fees before, that some people are presenting this amendment fee, and we would hope if you could ever get enough money to run through the end of the year, that they pay some uniform fee throughout the year, such as is done with crippled children. We don't feel any significant segment of the medical population should be given some fee, or no fee, and it ought to be uniform throughout the State Government.

DR. KERNODLE: I would like to say that this request for additional funds has been in the Budget Commission hands of the State for four years running, four different sessions, and they haven't done anything about it.

The fallacy of this program—and I think Jim will bear me out on this—is that the majority of the money is paying full repayment to the hospitals for their costs, eighteen days, and they get full reimbursable costs, or thereabouts.

The other thing is that the scale of fees has not been re-evaluated since the initial conception back in the late forties.

DR. DONNELLY: I went over these figures, and I went over them last week knowing this was coming up. These programs will save us approximately 20 per cent of our costs. Our fees are half what they should be, if they are balanced with the others. We are only running an eight-month program now. So right off the bat, we are lost, you see.

And then to make this problem worse, only about one-eighth of the patients treated—the physician in only one-eighth of the cases sends a bill in. So if you really make this—if all the physicians send bills in and we double the fees to bring them up to standard, then we figured yesterday that we need an additional $150,000 a year to run the program at the size it is now.

We did get funds this year from C & E, but we didn't get a straight grant. They didn't pay us outright. You utilize all lapsing funds of the State Board of Health, they said, so we were scraping this together. This is why we did not change the fees at the time we negotiated with the Medical Society, and Vocational Rehabilitation and the Blind Commission, and all other fees were changed. We could not change Cancer fees because of this reason. We would like to do it.

DR. KERNODLE: I agree you couldn't do it if you accept the policy that you are going to give out of funds and not try to go and get extra money each year. As long as you are going to the emergency funds, I think that you just should go and get as much as you need and not be carrying on a program that is inadequate, and that is what I think it is right now.

PRESIDENT RHODES: Without objection, we will accept it for information.

DR. THURSTON: The Advisory to the Board Welfare Committee—Ed Beddingfield covered most of that in his report, with the additional information that Mr. Brown is trying to find a Medical Director. It certainly would give us a first-hand bit of information on what is going on.

We would like that to be received as information.

PRESIDENT RHODES: So received.

DR. THURSTON: The Committee on Physical Rehabilitation felt that in the breakdown of clients and referral of clients to this Department, that it ought to be encouraged again that they go through the family doctor. They want to get from the Department the number of psychiatric patients being treated there and whether they have a panel of psychiatrists, and also if they go through a group clinics, or through a psychiatrist. They are having psychiatric rehabilitation now we found out.

The amputee problem, they would recommend that the patient first be checked by his medical doctor, and then with a surgeon who will operate, and then referred to a center familiar in the use of fitting of prosthesis, or to a physician who has special training in these appliances.

It is further recommended that the preference of the limb maker be selected by the patient and not the surgeon, and not be influenced by any Counselor.

It depends on some of these people who go to patients, and they get a certain type of appliance. They get it, and it doesn't fit, and doesn't work, and it has to be ordered again. It is extra expense, and it is felt that if it is handled that way, it eliminates some of the expense.

The third recommendation is that the patient be treated by a qualified physician in the community of his residence, rather than being asked to go to an unfamiliar community for his treatments. The Committee also requests that if the patient has a bad complaint that he be sent to an internist or general practitioner rather than being sent to a surgeon.

Fourth and final, the Committee would like to consider the idea of naming a representative, an ophthalmologist, or in some way put the blind under Vocational Rehabilitation. In rehabilitation, blind is treated entirely separately. I don't think those things require vote, but should be received as information.

MR. BARNES: I simply want to make the observation that both the Blind Commission and the Department of Vocational Rehabilitation have their own chosen Medical Advisory Committees, and that there is really no liaison between the Medical Society and those committees, except as we may have a member of their comittee on Physical Rehabilitation.

In the case of the Blind Commission, I believe that they have as a committee the entire board member ophthalmologists in North Carolina. But it is a separately appointed committee just the same.

PRESIDENT RHODES: Without objection, we will receive this then as information. I don't believe you need any action on that.

DR. THURSTON: The Committee on Venereal Disease—this was sort of an unusual committee meeting in that they had a program. Most of the others just had committee members meeting there, but they brought in slides and showed this program on the present status of venereal disease in the United States. They had one of these public health investigators there, and these are tremendous people. They are trained espcially to investigate the contacts of the venereal disease patient. The doctor doesn't enter into this. They get this information. It is privileged, in that they turn the patient over for treatment, but the doctor doesn't know the contact.

Maybe you understand around the State they have these Public Health Service people—they plan to have thirty-three such individuals working throughout the State, and the paper they presented was that 90 per cent of the contacts in San Francisco in the survey they made out there were homosexuals, homosexual contacts, and that there had been a tremendous upsurge in the incidence of venereal disease, and they are preparing this paper for release in the Medical Journal.

PRESIDENT RHODES: There is one other thing that came out there that was right impressive, and that was the tremendous upsurge in the incidence of venereal disease in the age group from fifteen to nineteen, and the big increase is in the Southern States, and the Coastal States, with non-white implications.

North Carolina, the incidence per 100,000 was 660, and in the District of Columbia, it was 7400-something per 100,000.

DR. PASCHAL: In that age group.

PRESIDENT RHODES: In the fifteen to nineteen age group.

DR. THURSTON: Occupational Health: The Committee discussed the problem of setting up this survey service, occupational health service in the smaller businesses, and they had found that contact with industrial management clubs in these communities helped them to gain access to the smaller businesses.

Employee Health of the North Carolina State employees was discussed. Also, they want to recommend that the Medical Society have a booth at our Annual Meeting and look after our own occupation, like they did at the AMA, and provide certain EKG, if you want EKG, or take blood samples, or chest films, or at least start a little health survey of our own folks.

We thought maybe we could get the Auxiliary to help on that.

Certainly if you talk about occupational health, we ought to do something for our own people and the AMA survey, just the initial part of it, has shown that they turned up a lot of difficulty in the people on the boardwalk up there.

PRESIDENT RHODES: I think we probably ought to have some action on that, and I would like to ask Dr. Norton to comment on that. I believe the Board of Health would probably have to cooperate here.

I gathered from Dr. Wilson that they would be willing to cooperate with equipment.

DR. NORTON: We would be very happy to.

PRESIDENT RHODES: Do I hear a motion on this point, because if you recall a few years ago at Asheville, there was such a facility set up, and it was almost completely boycotted because it had not been officially approved by the Society.

So I would like to hear a motion on this, making available at the Annual Meeting a facility, a physical examination for members of the Society.

DR. JOHNSON: I would like to move that this be implemented.

(The motion was seconded by Dr. Kernodle.)

PRESIDENT RHODES: Any further discussion? If not, so many as favor the motion make it known by saying "Aye"; opposed "No." So ordered.

DR. THURSTON: The Chronic Illness Committee had a very interesting meeting and reported on a lot of activity that has been continued over the past several years, both in-state and out of state, and numerous trips, and was very active, but had no specific thing that had not been brought to the Council before. They did want to mention the fact that the Drug Bank—in this Chronic Illness thing, a maintenance dose they thought should be provided for at minimum cost, and ought to be referred to the Pharmacy Committee or in some other way investigated as to just what the extent and involvement would be.

DR. BEDDINGFIELD: I have investigated that and can bring it up now or later, whatever you want.

PRESIDENT RHODES: Do you want to comment on it now?

DR. BEDDINGFIELD: I will be glad to.

The North Carolina Kidney Disease Foundation had a program on September 20 in Durham which I attended. It was a very fine scientific program with an all-star cast. At the meeting, I saw several members of this Society from across the State, and since then we have had a couple of letters, and a couple of telephone calls, and a couple of people down here have asked questions about the policy of the Society regarding the Drug Bank Program of the North Carolina Kidney Disease Foundation. This had some publicity in the newspapers also.

According to newspaper accounts, this Drug Bank Program was adopted and voted on at this meeting, and that wasn't the case. The people who were in attendance at this meeting were simply told that the drug bank was now in operation.

When the person registered for this meeting, it included in his kit of materials, which I have here, a letter of explanation on how the Drug Bank Program would work, and a few copies of application forms to fill out for patients to enable them to get drugs at a very minimum cost through the Drug Bank Program.

The thing that strikes me—two things: First of all, the explanation is made that the Drug Bank Program is designed to insure the normal relationship between the physician, the patient and the pharmacist.

A question came up, and we wondered if the pharmacist thought that this was a normal relationship for a patient, regardless of any investigation of his ability to pay, his being able to buy drugs from a centralized agency at considerably less than prices that might be charged in a retail pharmacy outlet.

Yesterday I called Mr. W. J. Smith, who is the Executive Secretary of the North Carolina Pharmaceutical Association, and asked him if they had taken any stand on this. He said no, they didn't know anything about it, that he didn't know about it until it came out in the newspapers. They had not had offered to them for consideration anything about the Drug Program of the North Carolina Kidney Disease Foundation. They had a policy that they were against any centralized distribution of drugs, unless there was some investigation of the patient's ability to pay, in which they would consider the thing as a humanitarian project.

The newspaper account stated that the Wake County Pharmaceutical Association would dispense these drugs by mail to patients in North Carolina for whom they were ordered by their physician. In each instance under this plan, the physician has to write the prescription, and he fills out one of these forms. The patient sends in his payment, and the prices are quite attractive. For example, 100 capsules of tetracyclene, 250 mm., would be $15. It would be 15 cents a capsule for this drug. They have to be ordered in the quantity stock packages that are available. Steroids and various antibiotics, and urinary antiseptics, are by and large the things that are offered under this program.

This is similar to other things. Yesterday, in the mail, I received what a number of you received, and this is from the National Epilepsy League, and this is out-of-state. They maintain a drug bank program, where also the physician prescribes a drug and sends it in, and this is sent out-of-state. This type of thing has been declared illegal by the Attorney-General of the State.

The Pharmaceutical Association of course is very concerned about it, and a number of our members are too. I think since our members are asking what Medical Society policy is, we should consider adoption of some such policy, and I have a thought to submit along that line, if I may.

I move that we adopt the following: Resolved, that the Medical Society of the State of North Carolina does not endorse any program of centralized drug distribution to patients which bypasses the retail drug industry, especially where such programs of making drugs available at allegedly reduced cost do not incorporate some investigation of the economic status of the patients in a demonstrable area of need.

PRESIDENT RHODES: Do I hear a second?

(The motion was seconded by Dr. Hollister.)

PRESIDENT RHODES: Now it is open for discussion.

DR. BEDDINGFIELD: Before you vote, I might like to add this: The Scientific Advisory Board of this North Carolina Kidney Disease Foundation—there is a representation of physicians who, I am sure, are members of this Society. They set this thing up. Dr. Jerome Harris from Duke, Dr. George Sommer from Chapel Hill, Dr. William Far-

ley from Raleigh, Dr. Demaria from Duke, Dr. Weston Kelsey from Bowman Gray, Dr. Gene McAllister from Greensboro—they are the Scientific Advisory Board of this thing.

If you think we are being hasty in adopting such a firm stand before getting in touch with these people, I think that would bear some consideration.

DR. HOLLISTER: I think most of those people are in the experimental and teaching area of medicine and their concept of this thing is a little different.

DR. KERNODLE: They have got another program going on in rheumatic heart disease, supplying penicillin across the board, and they have taken that out of the hands of some of the druggists too.

DR. BEDDINGFIELD: It is "A disease a month."

DR. KERNODLE: It looks to me that we are going to have to take a stand and evaluate those already in action, as well as any new propositions.

DR. STYRON: The Rheumatic Fever Fund or drug program is through the pharmacists and with their cooperation.

DR. BEDDINGFIELD: That is right.

DR. STYRON: That has been accepted by the local County Medical Societies. It has gone through.

DR. KERNODLE: It was actually accepted in here at one of the Council meetings. It was brought to us by Ed Bimbo at that time.

DR. STYRON: This is with the cooperation of the pharmacists.

DR. MURPHY: Is it properly our business where the patient gets our medicine?

MR. BARNES: In the quantities that may be elicited by the patient from this mechanism, is there any assurance of full physician supervision of that patient while he is consuming these prescribed drugs gotten from an outside source?

PRESIDENT RHODES: This has to be on the prescription of the physician.

DR. BEDDINGFIELD: There is certainly no day-to-day supervision, but neither would there be if he got them from the local drugstore. The basic idea of this is someone with chronic renal disease who would have to take continuous medication over a long period of time—

PRESIDENT RHODES: There is a minimum limitation on the time, I think.

DR. BEDDINGFIELD: Three months.

I think in all areas of health care, it is properly a matter for our deliberation, and I think that centralization of drugs and bypassing traditional outlets is a concern for us. I think we are that closely related to the drug industry.

DR. BIVENS: I don't know that we can police the drug industry.

DR. BEDDINGFIELD: We don't have to put our endorsement on it either.

DR. BIVENS: I don't know that that is the proper word for it.

PRESIDENT RHODES: Any further discussion of this motion? There is a motion before the house. As many as favor adoption of the motion make it known by saying "Aye"; opposed "No." So ordered.

DR. THURSTON: There is one other item. They felt that maybe a committee on accident prevention might be referred—this Patrick thing might be expanded to include accidents other than automobile.

Also, there was a lot of discussion about the nursing home establishment registration, which I believe you folks are familiar with, D. A. McLaurin serving on that, and they seem to be progressing nicely.

The School Health Committee discussed the preschool physical examinations and the implementation of those at the junior high school level, and Mr. Spencer from the School Health Coordinating Service sat in on that, and also the immunization service was discussed there.

They had one recommendation; rather, they wanted the Council to be aware of the fact that the Committee had made a shop talk on athletic injuries, the North Carolina Academy of General Practice initiating this. This was made up of three or four general practitioners and specialists in physiotherapy and athletic injuries, orthopedic surgeons, and the like, sitting down and having a business session over a three- or four-hour period with professional training, and then editing this. This was reported on tape, plus visual documentation, and then it was edited into a thirty-minute film which will be ready very shortly for presentation to local societies. This seemed to be an audio-visual aid that would be of great interest and maybe adapted to other areas of the Medical Society, and I certainly think that the Academy of General Practice should be commended on this new type of approach to the program, and the ones who participated in it said that they received a lot of instruction, or inspiration, and learned a terrific amount through going through this thing and obtaining this film from D. A. McLauren, Post Office Box 267, Garner, North Carolina.

It seems this might be adapted for television, and whether it will go on television is something else right now. I don't think we need to discuss it.

The Mental Health in Religion folks had a full meeting—the first one they had, they had representatives of all the medical schools. They also had an outside speaker whom they entertained at lunch. He was a representative of the AMA, Medicine in Religion, and I think that was mentioned earlier as a good activity of the Committee in inviting an outside speaker. I think that would help promote attendance at Committee meetings, and I think it might save some out-of-town, out-of-state trips. I think the extra expense of getting the Committee together with an outside expert might be helpful.

Dr. Hargrove was here, and he discussed the

problem between the Mental Health Department and the new Medical Advisory Committee. Dr. Charley Vernon discussed their educational program. Dr. Allen Choate gave the program for the Mental Health Association. The professor from Duke, Dr. Robert Connery, has $210,000 in a grant to study the application of the different mental health clinics to the local community.

It seems that we are forced in North Carolina to only have a few political districts within the State, whereas San Francisco and some of these other places in the country have multiple, as much as several hundred, political districts, taxing and otherwise. So far as this study is being done, maybe we will be prevented from going into some of this proliferation of different forms of government.

I believe they also had some recommendations: "That they wanted the State Society and the subcommittee of Medicine and Religion, a fellow from the AMA taken from their program—this group should give overall direction at the State Committee of a program of intra-state nature and encourage each county to name and activate a committee.

2. To introduce and distribute this program guide to county chairmen of medicine and religion committees.

3. To seek ways to encourage each county committee to include clergymen of representative faiths in the planning and implementing of the program.

4. To plan programs on the State level at the time of the State Medical Society meeting or other ancillary groups.

5. To provide education and training for county committee chairmen who might be invited to the state and county officers training meeting or the public relations meeting.

6. To prepare news releases for any such events on medicine and religion.

7. To have articles on various programs and their results in the State Medical Journal."

They would like to have the Society approval in going ahead with the implementation of this program as a subcommittee.

PRESIDENT RHODES: I will have to ask somebody, a member of the Council, to make a motion.

DR. HOLLISTER: I make such a motion.

(The motion was seconded by Dr. Johnson.)

PRESIDENT RHODES: So many as favor the motion make it known by saying "Aye"; opposed? Carried.

DR. THURSTON: The Committee on Child Health and Polio: Based on the detailed discussion of the Committee at a July meeting in Durham they would not recommend a simultaneous Statewide mass program of oral poliomyelitis immunization, but would recommend county-wide programs using any of the available vaccines.

Implicit in the decision, however, is approval of any of the oral vaccines in mass campaigns when given in conformity with suggested guidelines. Dr. Koomen was requested to draft such recommended guidelines for distribution to County Medical Societies.

Dr. Koomen gave these guidelines, and perhaps Dr. Norton could answer some questions on that. This is for the guidance of the County Societies who might participate in this program.

It is suggested that these be done before May 1, so as not to interfere with any virus epidemic. These guidelines are the Child Health and Poliomyelitis Committee recommends that all poliomyelitis programs be held only during the late Fall, Winter and early Spring months in order to prevent interference by enteroviruses.

In view of the neurotropic potential of vaccina, measles and poliomyelitis viruses, it is urged that use of other live virus vaccines be suspended for a period of one month before and one month after feeding of oral poliomyelitis vaccine.

It is strongly recommended that no individual who appears to be acutely ill be given oral poliomyelitis vaccine.

The Committee recommends to the Executive Council that the Immunization Subcommittee of the Committee on Emergency Medical and Military Service be combined with the Committee on Child Health and Poliomyelitis.

And it also recommends that the Executive Council take cognizance of the Immunization Assistance Act and publicize details of the program as they deem feasible. Details of this program can be furnished by Dr. Koomen or Dr. Norton.

PRESIDENT RHODES: Would you like to comment, Dr. Norton, on this?

DR. NORTON: I think that covers it, unless there is some question.

DR. BENTON: I was at that meeting, and I am concerned about this thing because it does involve some funds, potential for the State Society, if it is worked just right, and I asked them specifically, do they approve of oral poliomyelitis vaccine, and they said yes, they approve of it. It doesn't make any difference whether you give univalent or bivalent.

What is your objection to doing it statewide? They thought that logistically it was impossible to do on a statewide basis, but the representatives of the drug firm there guaranteed that it could be done and would be done.

So I would like, from a financial standpoint, for the good of this State Society rather than county —they are advising that each county have a contract with whichever drug firm they want to, and the drug firms would underwrite it. They will charge a quarter, and any surplus funds will be turned over to either the County Society, or in this case the State Society.

I would personally prefer to see us do it on a statewide basis, to be worked out, rather than on a county basis, because that Committee is after

all not expert on logistics. They are just experts on children. I think we can take that part of their report all right, but I would like to see us do it on a statewide basis.

PRESIDENT RHODES: It is your understanding that the drug firm with whom the contract is signed could put this program on.

DR. BENTON: They guarantee that.

DR. THURSTON: They said they had never done a program of such magnitude before. They have done large cities like Cleveland, Ohio, and others. This is for 4½ million people. That was the reason the Committee veered away from this.

Just as he said, the logistics of trying to do all this in forty-eight hours, rather than doing it county by county where you could mobilize the personnel throughout the State in different areas, is important.

DR. BENTON: Do you think it could be done statewide?

DR. NORTON: That was discussed a year ago, and the plan was given up on account of the question of one of the types of the virus; and then later on the Committee felt that they would like to recommend that it not be done on a statewide basis because, as you say, it had not been on that large a basis before, but leave it to each County Medical Society to follow up as they see fit. Some of the counties have been going along with this. I think there are about four or five.

DR. THURSTON: They are ready to go but haven't done it. They are ready to go on a statewide or county basis.

DR. BENTON: Not all the counties in the State are going to get it if it is left on a county basis. Some of the counties will and some won't. But from your department, do you think it could be done on a statewide basis?

DR. NORTON: I think it could be done.

DR. BEDDINGFIELD: I don't know whether any of the other Councilors were responsible or not, but a representative from Pfizer came to see me last week anticipating that this would be voted on at this Council meeting, and he anticipated it was going to be a fight between Pfizer vaccine and Lederle vaccine, and he stated that their proposition was that they would underwrite the whole project, so that there was no element of risk of loss to the State Society in this, and that moreover any benefit, as Dr. Benton has said, would accrue to the Society, and that they would furnish the entire public relations program. It was said they had sixteen men ready to send down here in public relations to put the program on.

DR. NORTON: John Kernodle was in on the discussions when we were planning to go ahead before on that.

DR. THURSTON: The Pfizer vaccine would require an additional trip, wouldn't it?

DR. BEDDINGFIELD: That's right, three trips

DR. THURSTON: That was the only objection. The price was not too much different, but just the fact of organizing another trip was the thing that concerned the virologists.

DR. BEDDINGFIELD: Did Lederle agree to underwrite any potential loss?

DR. THURSTON: It was stated that they did, but that was the reason they didn't consider it. We did not hear the representatives of the other company, but was accepted that Wyeth or Lederle would do it similarly.

DR. BENTON: It didn't make any difference giving trivalent or univalent.

DR. THURSTON: They again were favoring it because of the logistics of the thing, not because of medical reasons.

DR. BENTON: The Committee didn't care whether you used one or the other.

DR. BEDDINGFIELD: It is two times or three times.

DR. BENTON: Pfizer recommended the univalent type, but that if you wanted it all in one dose, they would produce that too, and they would underwrite it.

I said "You mean it won't cost the Society a penny?" And he said no, "We will underwrite it and take the cost out of what is done, and what is left over we will give to the Society." This is at twenty-five cents.

DR. THURSTON: That is the dose of the vaccine. Try to get everybody to give a quarter who gets it.

DR. BENTON: I move we put it on statewide.

PRESIDENT RHODES: Do I hear a second to that motion?

(The motion was seconded by Dr. Johnson.)

PRESIDENT RHODES: It has been moved and seconded. Now it is open for discussion.

DR. KERNODLE: I was getting ready to comment that I am a little surprised that this same Committee would come back and recommend that it be done on a local basis, and a hit-and-miss proposition throughout the state. One of the main objectives before was to get a mass population, wide area involved in this. If they didn't get a wide enough area, it wouldn't be worth much to the business anyway, because you would have overlapping.

I think the statewide program can be done. It is going to take some organization and timing, and the Committee is going to have to do a lot of leg work on this thing, regardless of how much they pay in the overhead and cost of it. There are still going to have to be some doctors involved in it in a big way, and it is very important to realize that. If we take this thing and decide it on a state level, to do it statewide, all of us will be involved with a considerable amount of time getting organized. I can see that very definitely.

I think it is the only way to immunize this group in North Carolina, though. Five or six counties wouldn't be of much benefit.

DR. THURSTON: They figure that 70 per cent of the counties would participate. That is a guess. There are five that are presently committed to it. You might get 100 per cent statewide, but they felt 32 per cent of the people might get it, it protects the rest of the population. They thought that either way the population would be protected.

DR. KERNODLE: I think it would be excellent public relations for the State Society, and if it's going to be underwritten and no chance of any loss of money, I don't see why we shouldn't take this on in a desire to improve our image.

DR. NORTON: The problem is simplified considerably over what it was when we were considering it before and then abandoned it when the trouble popped up.

DR. THURSTON: John Robert is right on this publicity and public relations, in that you could saturate the public by television, if it were done statewide—it might be confusing if the counties were overlapping. If it is done statewide, you could get television in on it. You could not do this on a county-by-county basis.

PRESIDENT DHODES: Any further discussion of the motion?

DR. PASCHAL: I think we ought to bear in mind that it is of decided benefit to the population, and it would also improve our image, so to speak; but it would also, I think, be very beneficial to the people of North Carolina. I am for it.

MR. BARNES: From the standpoint of logistics, who is authorized to do the contract in one or the other of the companies, if you go into this thing? You cannot wait until January for this Council to choose between the two. You have got to have some advice.

DR. THURSTON: We can get a committee to look at it, three people; but this group would have to authorize somebody to do it, if you are going to do it on a statewide basis.

If something happened, you could still go on and have it done.

PRESIDENT RHODES: The committee would have to guide us. We would have to refer this back to Committee with this recommendation.

DR. BENTON: I would like to see it in the Public Health Committee, because the grown people are going to get it too, not only children. Give it to somebody that is enthusiastic about the thing.

PRESIDENT RHODES: We haven't got a Public Health Committee.

DR. BENTON: It should be referred to an appropriate committee. I think Child Health and Polio is there to handle it.

DR. BEDDINGFIELD: May I offer an amendment to the motion to the effect that if this motion passes that we go on a statewide basis, that this be referred back to the Committee with a recommendation by Council that they seek to implement it on a statewide level, that they talk to the various companies involved and present it to the Executive Officers of the Society with a mail ballot confirmation from the Executive Council.

PRESIDENT RHODES: That would clear the authorization to sign the contract. Do I hear any further discussion?

DR. PASCHAL: I think that mail ballots could be eliminated by positive action here today. We could adopt it and approve it in principle, and it would be to let the administration know what is going on for the Committee to report back.

PRESIDENT RHODES: We could authorize, once the Committee made its final recommendation —authorize the Executive Director to sign the contract.

DR. PASCHAL: That is right.

DR. KERNODLE: I think the President should sign the contract, John. Authorization for the President to sign the contract upon recommendation by the Committee.

(Discussion off the record.)

PRESIDENT RHODES: As I understand it, this is going to be an underwritten program.

DR. THURSTON: It is verbally underwritten.

PRESIDENT RHODES: That ought to be in writing.

DR. BENTON: I said you mean by that it is not going to cost us anything? They said, "Yes." If you make a profit, you are going to get the profit."

DR. THURSTON: No program they put on had resulted in a deficit.

DR. BEDDINGFIELD: That is the reason I put that in.

PRESIDENT RHODES: Any further discussion?

MR. HILLIARD: I think their offer to underwrite it was conditioned upon the Society approving the requesting of contributions of at least twenty-five cents per dose.

PRESIDENT RHODES: That was consistent with the program before.

Any further discussion? So many as favor the motion make it known by saying "Aye"; opposed "No." Carried.

DR. THURSTON: Nothing in this would prohibit the county from going on if it failed to go on in the state.

PRESIDENT RHODES: I don't think it would interfere with the county.

(It was regularly moved by Dr. Raiford and seconded by Dr. Paschal that the report be adopted. The motion was put to a vote and was carried.

DR. KERNODLE: I think you should contact the counties involved in this at once and tell them that the State is participating, and you would want to coordinate the case for your press releases.

PRESIDENT RHODES: Frank Jones, the report of the Committee on Nominations.

DR. FRANK JONES: The Committee on Nominations has met, and I will read you a brief report.

At the conclusion of the report, I will be glad to answer any questions I might have information on.

The Committee on Nominations, 1963-64, met at Mid Pines this date and has the following report of its deliberations and actions to present to you for your decision:

Being aware that our predecessor committee did recommend that Asheville be the site for the 1966 meeting and being aware that the House of Delegates at its first session did accept such as the site, and that in a subsequent session the House of Delegates did rescind that action, and recommend that the current Committee on Nominations consider and investigate the possibility of a cruise as the site for the 1966 meeting, this Committee has followed up on this recommendation. In accord with this suggestion, the Committee on Nominations did set a special meeting lasting from 9:00 a.m. to 1:30 p.m. this date and we present to you this report and our recommendation.

We reviewed a promotional film presented by the Caribbean Cruise Lines and listened to a presentation by their representative Mr. John Standish. We interviewed Mr. John Bynum Miles, President of John Miles, Limited, travel organization of Charlotte and viewed his presentation. We received information from the Jack Tar Hotels of Durham as presented by Mrs. Mildred Callaghan.

Following these presentations the following actions were taken by the Committee by motion and vote:

1. It is recommended that the meeting of the Medical Society of the State of North Carolina in 1966 be held as a six-day cruise into the West Indies or in the Caribbean with the probable port of call being in the Bermudas. This motion was passed by a majority.

2. It is recommended that such cruise be, if at all possible, pitched to the utilization of one of the "Queens" of the Cunard Lines. This motion was passed by a majority.

3. It is recommended that if a cruise does not prove to be feasible after further investigation, that the City of Durham be considered as a site for the 1966 meeting, providing the Executive Officers of the Medical Society are convinced that Durham could furnish the proper facilities and accommodations. This motion was passed by a plurality vote.

This, Sirs, concludes the recommendations of the Committee on Nominations.

PRESIDENT RHODES: You have before you the report of the Committee on Nominations. I think we should consider the first item separately, and that is the recommendation that a six-day cruise be held for the Annual Meeting in 1966. Discussion?

DR. BENTON: You tell them about the cost of it, the cost of this cruise.

DR. JONES: I have some data. The cost of running a cruise depends (1) on the carrier, (2) on whether or not the carrier can come in to any particular port, (3) whether or not the carrier is going to go off a regular run to come to a port.

Now, for instance, it costs $60,000 to send one of the "Queens" down from New York to Norfolk. It costs, I believe, around $30,000 to send the Caronia down. We have had some indication that one of the "Queens" may be used for another large organization about the same time.

Now presuming we use the "Queen," one of the "Queens," it would be approximately $47 per day per person. It would be six and one-half days to Bermuda, two en route, two return, and one and one-half days in Bermuda, probably Nassau more than likely.

We would be forced to guarantee a certain number, but we would not be forced early to decide on the size ship that we could use. We would have to give these people a commitment, so that they could be working on it soon.

Now there are several agencies that you would want to get involved with—

DR. STYRON: What would be the minimum number under any circumstances?

DR. JONES: I would say that you could run probably 550. I know, for instance, the Brazil or the Argentina, the Moormac could run that many. The Caronia would sail with 450—I believe that is correct for their minimum—and one of the other ships would run a 600 minimum. The "Queens," I believe it was 1250 that they would have to have paid memberships, so to speak, before they could economically operate, and there are two or three things that might be considered, too.

If you bring the Queen in, you are going to have to lighter her out, if you bring her into the Port of Wilmington, because the Queen cannot dock there. The Queen can only dock in New York, Norfolk, and it probably cannot dock in Charleston.

The other point is that you could get the smaller craft into the Port of Wilmington. We could still get into Wilmington by lightering out, which is done many, many places.

Then there is the question of whether they can handle exhibits. As far as I can say, the "Queens" can handle it by using the covered portion of the Promenade Deck for the exhibit area. There is another ship called the Riviera which flies the Italian flag and is currently leased to one of the lines. The Queen could handle the exhibit in this area here, which is the covered Promenade, which runs, I would say, back of midships all the way forward either side, and leaves all these other rooms for available functions.

(Discussion off the record.)

PRESIDENT RHODES: It looks like we are forced to take some action at this time. There is not much choice in our delay as far as any decision is concerned. We are obligated to take some action

here today about what we are going to do about this, in view of the other commitment.

DR. BENTON: What do you feel about it, Mr. President?

PRESIDENT RHODES: If you want my frank opinion, I think it is an undertaking that is so fraught with doubtful possibilities that I feel I would hesitate to commit ourselves on this issue at this time.

DR. RAIFORD: I am not speaking for or against it, but I think the Council ought to be acquainted with some of the realities of a situation like this.

I spent approximately a year as ship's doctor on one of the Grace Line boats that cater to groups such as this. I have seen the fanfare of sailing day, and I have seen tugs paid to blow whistles, and I have seen what went on in between, and the sailing day and the docking day are sort of false faces.

Everything is not gold that glitters on a cruise. Anticipation is a wonderful thing, but I wonder how many of the group that went on there have considered the possibility of mal de mer, and I will tell you right now that $47 a day is an awful price to pay to be seasick.

(Discussion off the record.)

DR. BEDDINGFIELD: I move that we thank the Nominating Committee for this enlightening discussion and that the Executive Council go on record as favoring a meeting on land in 1966.

(The motion was seconded by Dr. Kernodle.)

PRESIDENT RHODES: Any discussion of the motion?

DR. BENTON: Would there be any objection—I am in favor of that too, but the thing about this in the future—would there be any objection to the Caribbean people putting on a show in 1966 or '67 so that you could get an idea of whether it would be popular with the people there or not? The Caribbean Cruise Line people put on a pretty good show. What do you think about asking them to do that in Greensboro at our next meeting, with the idea of maybe in 1967 there might be enough members that would love to have it.

DR. PATTERSON: At least a poll of the membership of the Society as to who would be interested in 1967 or '68.

DR. JONES: '67 will have to be decided in January and finalized in May.

PRESIDENT RHODES: '67 would be decided by the Committee on Nominations in its report to the House of Delegates next May.

Does anyone want to accept that as an amendment?

DR. KERNODLE: I think we are barking up a tree of what we would like to do, but I think for the Society it is very bad. I like to go on cruises, but I think this would be very bad for the Society, and I would say that if you went on a cruise at $47 a day, two members going, you would spend a minimum of $1000, and there are not many of them—you won't get a very large number of people participating in that cruise at that price, and you are losing all of your people that work for the State Government. They won't be able to go, because they wouldn't have expenses paid for them to go.

PRESIDENT RHODES: We have spent a good deal of time on this problem. Is there any further discussion? There was some discussion by Dr. Benton that we might consider having a film demonstration perhaps.

DR. KERNODLE: We are just fooling ourselves, John. I think that this Society had better realize you cannot do it and keep the membership interested, because it costs too much.

DR. BEDDINGFIELD: I think that would be within the province of the Nominating Committee, if they wanted to invite somebody to appear and talk about it. I would rather not have it in the motion.

PRESIDENT RHODES: If there is no further discussion, so many as favor the motion let it be known by saying "Aye"; opposed "No." It is carried.

Now we have got to decide about what we are going to do about the affirmation of our commitment to Asheville.

The Nominating Committee has brought up a recommendation that if the cruise does not prove to be feasible, that after further investigation the City of Durham be considered as a site for the 1966 meeting, providing the Executive Officers of the Medical Society are convinced that Durham could furnish the proper facilities and accommodations.

What action should be take on this?

DR. KERNODLE: Mr. Chairman, I would like to move that we follow the direction from the last Nominating Committee in recommending Asheville, for the simple reason that the qualifications are these: There has been no survey made of Durham, and if we procrastinate again to wait for a survey of rooms, and meeting places available, we are in jeopardy of holding this place in Asheville. I think we should think of them in adequate time.

PRESIDENT RHODES: I wonder if we could defer action for a few minutes.

I would like to call for a Committee on Grievances.

DR. KERNODLE: We have nothing to report at this time.

PRESIDENT RHODES: Problems relative to the 1963 elections of the House of Delegates?

DR. JONES: I don't have any report.

PRESIDENT RHODES: That was resolved this morning. That was resolved by declaring Dr. Fuller ineligible at the time of the election, declaring him now eligible and re-electing him.

Thank you very much, Frank, for all your work.

Dr. Styron is going to report on Dr. Goldner's Commission.

DR. STYRON: The Committee on Scientific Work met under the chairmanship of Paul Maness the first day of the conclave. John Rhodes and I were there. It was decided that the theme of the Annual Scientific Program would be on Monday, Hypertension (Surgical and Medical) plus a panel discussion; Tuesday, Preventive Medicine (Cytology and Immunization) plus a CPC; Wednesday, the usual program, conjoint session with the State Board of Health, with not more than two speakers addressing, and so forth. Any comments?

The Committee on Awards recommends that the Gaston County Award for the outstanding scientific exhibit be given to the winner at the time of the meeting rather than a year later, as has been done in the past. The mechanism for bringing this about is included in a long summary here.

PRESIDENT RHODES: They have made the request before, and if I am not mistaken the Council has approved that request prior.

DR. STYRON: That has been approved previously.

The Moore County Award is the selection of the best scientific paper whose author would receive the Moore County Award. It is suggested that the Section Chairman be notified to appoint a committee to determine the best scientific paper for each section, and that the name of the author of the paper be submitted in writing on a previously printed form to the office of the Executive Director, who in turn will give them to the Chairman of the Awards Committee. The Chairman will write to each section exhibitor notifying him that he is eligible for first prize if he submits a completed paper to the Chairman of the Committee. Within two months following receipt of this letter the Chairman will then have the papers that are received reproduced and distributed among the Committee members for their selection.

One month should be allowed for their choice. The papers will then be submitted to the editor of the North Carolina Medical Journal, and the winning paper will then be published along with a photograph and a brief biography. The essayist could receive formal recognition by the President at the next meeting of the State Medical Society.

PRESIDENT RHODES: I don't know that we need action on that.

DR. STYRON: The Cooper Memorial Award (Wake County) is given by the Wake County Medical Society for the best scientific paper on the subjects of preventive medicine, maternal or child health, or public health. The same procedure should be followed for determining the winner of this as for choosing the winning author and for publishing the winning paper.

PRESIDENT RHODES: That requires no action.

The Committee on Arrangements, of which I was Chairman: We met on the first evening of the conclave. Dr. Carr discussed the details, the arrangements for the 1965 meeting. The Merchandise Mart is recommended by the meeting, and all the necessary mechanism for having the banquet and the meeting and so on, are included in this information.

DR. KERNODLE: I would like to inquire, is it planned to use the Charlotte Hotel as headquarters and have the banquet there?

DR. STYRON: The banquet is at the Park Center. The banquet will have to be catered.

The next item is the discussion of the Greensboro meeting for 1964. This is well planned, and the details are completed. I have all the information if you want it.

The physical setup is excellent at the Coliseum, and I believe they call it the Townhall, and I think we will be well taken care of there.

There is one item that I must mention here. The Committee on Arrangements gave approval to paramedical groups to register and attend meetings. Admission will require registration and will be by badge only with the individual's name on the badge. The Committee recommends that a registration fee—as a recommendation by one member of the Committee there, and I promised that I would bring this up for discussion, the point being that you would have some way of checking on it. They must present some form of credential. In the past, there has been no charge, but this was brought up to be presented to the Council.

MR. BARNES: There has never been any registration fee before, but there was some suggestion that there be a charge to anybody not having standing.

DR. STYRON: Not a current members of the AMA in good standing. These are people unattached to organized medicine in any fashion.

PRESIDENT RHODES: The question is whether or not it would be proper to institute a registration fee for physicians attending this meeting who were not members of the AMA. That has never been done before in this State, but as you know, in many other meetings there is a charge for non-member registration.

DR. STYRON: If you have graduates in the training program, you might get a little mixed up, sometimes in an effort to collect the fee for registration.

PRESIDENT RHODES: What is your estimate of the number of such people who attend our meetings?

MR. BARNES: Outside of the scientific exhibits, I would say it is something like ten or fifteen people, maybe.

DR. STYRON: I disagreed with Dr. Carr on this.

PRESIDENT RHODES: I doubt if it is worth consideration.

DR. STYRON: I said we would recommend that

they simply acquire and wear a badge. I so move.

(The motion was seconded.)

PRESIDENT RHODES: Any discussion? As many as favor the motion make it known by saying "Aye"; those opposed? Carried.

DR. STYRON: The Committee on Audio-Visual Scientific Post Graduate Instruction: The days of Monday and Tuesday were agreed upon by the Committee as the days in which presentations would be shown, with morning hours of nine to eleven and two to four-thirty in the afternoon.

A meeting room for 100 to 120 persons has been arranged.

The Committee agreed to include topics of the theme agreed upon by the Committee on Scientific Work, Hypertension and Preventive Medicine (Cytology and Immunization) plus some variation to attract the general membership.

Each member of the Committee will serve as moderators of different sessions of the Audio-Visual Program.

Equipment needs will be furnished by the University of North Carolina School of Medicine and Medical students will serve as production helpers.

No action necessary.

The Committee on Scientific Exhibits, Max Rogers, Chairman, stated that work was started immediately after the Committee was set up. He contacted exhibitors and found that the best exhibits were already dated up less than one week after the annual meeting of the AMA. Out of forty-one exhibitors contacted, he has now lined up twelve to fifteen exhibits for the 1964 meeting. The exhibits are adequate and are considered of excellent quality.

MR. BARNES: In connection with that report, I would like to inquire of Dr. Benton his recollection. We did approve of some expense money for the Chairman to cover the American College of Surgeons meeting with reference to soliciting good grade quality exhibits. That is my recollection.

DR. BENTON: I think so.

DR. STYRON: The following recommendations were made:

1. That headquarters office mimeograph a slip of paper to be included in the letter of acceptance to the exhibitors requesting predominant background color of their exhibits.

2. Request that an article be included in the October issue of the Public Relations Bulletin on scientific exhibits.

3. Request headquarters office to include in the letter of instructions to exhibitors that they may ship exhibits direct to the Coliseum and exhibits will be held there.

The Committee on Medical Golf Tournament, William W. Forrest, Chairman, advises that the golf tournament will be held on Monday, May 4, and Tuesday, May 5, at the Sedgefield Golf Course, using the Calloway System (low gross, low net.)

The headquarters office will arrange for the prizes and will have them on hand to be given out at the beginning of the drawing of prizes on Wednesday, May 6.

Dr. Forrest will conclude all arrangements with the manager of the Sedgefield Golf Course. Players are advised to acquaint themselves with the rules and hold all putts.

PRESIDENT RHODES: Will you make a motion that this report be accepted?

(Such motion was regularly made and duly seconded.)

MR. BARNES: There was some vote in the Committee on Credentials that they wanted incorporated. It is a question of the Committee on Arrangements working with the Committee on Credentials.

PRESIDENT RHODES: The motion has been made that we accept and approve this report. All in favor say "Aye"; opposed "No." It is carried.

Now let us go to Committee on Negotiations.

DR. HOLLISTER: The Committee on Negotiations has not found it necessary to function; therefore, no report.

PRESIDENT RHODES: Motion has been made that we go to Asheville in 1966, provided that Pinehurst will not accept us, or pending acceptance by Pinehurst.

(The motion was seconded by Dr. Johnson.)

PRESIDENT RHODES: Any further discussion? If not, so many as favor the motion say "Aye"; opposed "No." It is carried.

Let us consider problems of early predating important Medical Society functions in order to secure accommodations for meetings and attendants.

MR. BARNES: It is a question whether you want to commission me to seek a place for 1966 for the conclave, and Durham has bid for that.

We have met in Durham very satisfactorily with the conclave last year.

PRESIDENT RHODES: They have added on this motel in connection with that since then.

DR. BENTON: I move we come back to Pinehurst.

(The motion was seconded by Drs. Raiford and Hollister.)

PRESIDENT RHODES: As many as favor the motion make it known by saying "Aye"; opposed "No." Carried.

Officers' Conference at Pinehurst. 1965 is the date we are to consider.

DR. BENTON: I move Pinehurst.

(The motion was seconded by Dr. Johnson.)

PRESIDENT RHODES: Any discussion? So many as favor the motion will make it known by saying "Aye"; opposed "No." Carried.

Consider proposed survey on Mental Health in North Carolina under $250,000 Government grant to University of North Carolina.

MR. BARNES: I thought there was some plan

to have Mr. Smith here, but the Mental Health Committee discussed that.

PRESIDENT RHODES: I hadn't heard about it. The only thing I know about that is that there has been a grant made available to the University of North Carolina for the survey and study of mental health needs in North Carolina. The man who heads this up is in the Department of Sociology over there.

MR. BARNES: The School of Social Science. We understand that he is to move operations to Raleigh and he anticipates carrying on, conducting this survey through medical people as well as others. He gave a brief report to the N. C. Mental Health Council, which is not our body; and just incidentally, I was present and heard his general plan, which he ad libbed and I have no notes on it other than it looks like we are going to be pretty sharply involved.

PRESIDENT RHODES: I wrote him a note, and I will say this: I told him that any activity or any undertaking would necessarily include the alerting of the medical profession and its cooperation. That is about what I said to him. I don't know that we need to take any action on this.

MR. BARNES: I just wonder, since Dr. Patterson is in Chapel Hill, if he could review with him and be prepared to report to the Council what the initial setup and progress is in January on this thing.

DR. PATTERSON: An outline of his plan.

PRESIDENT RHODES: We could direct you to do that.

A report on the 1963 SAMA Convention, May, 1963, in Chicago.

Dear Mr. Barnes:

> Thank you for your letter of June 6th containing a check for $48.98 to cover the expenses of Bowman Gray's delegate to the 1963 National SAMA Convention.
>
> You may have noted that John Packer, the Bowman Gray delegate, was elected as the Speaker of the House of Delegates of the national organization, a signal honor for both John and Bowman Gray.
>
> Please express our appreciation to the Society for its most generous assistance to our chapter.

MR. BARNES: I might say that this is just a residue of just that one chapter expense. We had advanced expenses based on common carrier to each one of the three chapters in the State, and they all covered this.

PRESIDENT RHODES: That is provided for in the budget.

We move on down to the third page.

Is there any unfinished business? If not, we will go along to old business.

Consider policy on European flight tour proposal for 1964.

Mr. George Jones of the Patterson Travel Agency has been very much concerned that we give consideration to a repetition of our effort to develop a tour next summer similar to the one that was proposed this last summer.

As you know, the tour proposal came to the Council at its meeting in January, and the travel agency felt that perhaps we got started a little too late on promoting it, and I think we had 44 firm applications, and we needed 140 in order to implement the tour; so it fell through.

The question now is whether or not we would be interested in permitting the travel agency to promote such a tour for next summer. There is a great deal of material here, with the outline of the itinerary, and this is a voluminous amount of material, and I don't believe we have time to go into it here. But I would like to have an expression from the Council on this proposal. I brought it to the attention of the Conference of the Auxiliary on the 10th of September. I did not get an enthusiastic expression from them. I would like to hear some discussion here, so that I can make a report to Mr. Jones.

DR. PASCHAL: Mr. President, if I might just express my sentiments about this, I don't see that it is any function of the Medical Society to try to be sponsoring or developing a flight, a commercial flight to Europe of this nature. Flights are available all the time. There are chartered flights in which our membership can participate, if they want to go by chartered flight. There are a variety of them that are available. This involves a commitment of the part of the Medical Society of a considerable amount of money and I just don't believe we ought to concern ourselves very much with trying to promote this sort of thing.

If they can find some way to do it without subjecting the officers of the Medical Society and the Medical Society through them in this massive amount of money—that is, in making a commitment —why, I would have no objection to them trying to develop it along those lines. But I would be inclined not to participate in this.

DR. JOHNSON: I don't think anyone can speak for anyone other than ourselves.

MR. BARNES: I would simply make this comment: By the action of the Council last year, of course we were committed to working with them on a charter which did involve financial responsibility, and a contract, and all that. Now they had indicated to us—and I am sure that Dr. Kernodle will reiterate this—that they would bear all of the promotional expense in the letter and postal communication with the membership to elicit interest in this undertaking.

We were just bombarded throughout the months between certainly January and right up until early June with the desire for various types of communication, and there were actual costs or outlays, to say nothing of staff effort, of something like $600 plus involved in promoting this authorized chartered flight last year, with the understanding

that they would remit. And when we got all through and the thing was cancelled, we presented them with an account of this expense, and they tried to deny that they had any responsibility for it.

In the interim, they have come up with the suggestion of a new charter undertaking, and they did remit a token of that payment, on account, of $200, with an indication that they would take care of the rest of it later on; but there are still $400-odd that we have laid out that they have not taken care of.

PRESIDENT RHODES: Any further comment? Does somebody wish to make a motion?

DR. PATTERSON: I should like to move that the Society not participate in any commercial flights or tours.

(The motion was seconded by Dr. Raiford.)

PRESIDENT RHODES: Any further discussion?

If not, so many as favor the motion let it be known by saying "Aye"; opposed "No." Carried.

Now we come to new business, and I would like to point out to this group that Dr. George Paschal, one of our members, has recently been invited to serve on the Council on National Security of the AMA, and has accepted this appointment, and I think he is to be commended on this, and we are proud of his recognition.

Consider resolution relative to passing of Editor, Wingate M. Johnson, M.D.

As you know, Dr. Johnson died in the early part of the month, and that leaves us without an editor of our Journal. Subsequent to his illness in the Spring, he indicated that he would like to associate Dr. Robert Prichard with him in an assistant type of capacity, and by request of Dr. Nicholson, who is Chairman of our Editorial Board, Dr. Prichard has agreed to continue in that capacity until an editor has been selected.

He is now acting editor.

I would like to have the matter clarified here, whether or not the editorial board selects the editor, or whether it has to be done outside the board. Who did the original one? I reviewed the minutes of the original action back in 1939 or '40, and the editor-in-chief was elected by the editorial board.

MR. BARNES: I think that is correct. Of course, this item on the agenda was to consider a resolution of someone so eminent, but I presume that any action of the editorial board, when it is able to meet and act on this thing, will be brought back to this Council, as required, because they have to report to the Council their actions and get them approved.

So I would presume that even the selection of the editor has to be approved by the Executive Council.

PRESIDENT RHODES: Now the question of a resolution memorializing Editor Johnson.

DR. PASCHAL: I think it is appropriate, and I think either the Chair or a designated member of the Council should prepare an adequate resolution to be incorporated in the minutes of the transactions of this particular body, and a copy of it sent to his wife and other members of his family.

PRESIDENT RHODES: Without objection from the Council, I should like to appoint Dr. Paschal and Dr. Styron, who is a member of the Editorial Board, to draw up an appropriate resolution to be submitted to the Journal, to the family as you have suggested, and to the AMA Journal.

I would like to have a motion authorizing that.

DR. JOHNSON: So moved.

(The motion was seconded by Dr. Kernodle.)

PRESIDENT RHODES: As many as favor the motion let it be known by saying "Aye"; opposed "No." Carried.

DR. STYRON: Although it is necessary for the Editorial Board to consider various possible editors in the future, it is not clear to me whether or not the Editorial Board should first go through a group of applicants and a group of suggested editors and select one to come back to the Council. Now this makes a difference, because I am sure that the members of the Council have many different ideas of various men they would like to suggest as future editors of the Board.

Now as members of the Editorial Board, we have discussed and have written and suggested men for replacement of Dr. Johnson, but the question is there seems to be no fixed policy in this matter, whether the Editorial Board should consider a group of people and bring it down to one man and submit this to the Council for approval, or whether the Council gets in on the discussion of possible candidates. You see what I mean?

So far as I know, there is no written precedent for the selection of the editor.

PRESIDENT RHODES: You have heard Dr. Styron's discussion. Is there any further discussion?

DR. PASCHAL: I think it is a problem of enough importance for us not to try to make any decision about it here today.

DR. STYRON: The Editorial Board is going to meet in October to discuss the possible suggested replacement. We intend to do that. But I am certain that each member of the Editorial Board would be interested in hearing from various members of the Council about the possible future editor.

DR. RAIFORD: The Editorial Board selects an editor and then brings it back to the Council for verification or confirmation.

DR. STYRON: That is what the intention is, but so far as I know, there is no precedent for this, except the original.

PRESIDENT RHODES: There is nothing in the Constitution about the editor.

DR. PASCHAL: Doesn't the House of Delegates elect the members of the Editorial Board?

PRESIDENT RHODES: The Constitution simply provides that they be elected by the general session.

Any further discussion? I don't know that we can take any real action on this at this time. I think we have to wait for some recommendation from the Editorial Board.

DR. KERNODLE: Leave it to their discretion whether to bring one or three names back.

MR. BARNES: You can affirm the action of the Editorial Board so far as the authority of the acting editor is concerned.

PRESIDENT RHODES: We might best do that.

DR. PASCHAL: I move that the current acting editor of the Editorial Board be certified and approved by this Council.

PRESIDENT RHODES: Do I hear a second?

(The motion was duly seconded.)

PRESIDENT RHODES: As many as favor that motion let it be known by saying "Aye"; opposed? Carried.

MR. BARNES: Two communications from the State Medical Journal Advertising Bureau.

> Mr. Jackson tells me there is a strong possibility that your Society will wish to retain its shares in SMJAB, Inc. If this is the decision of your Board at its September 28 meeting, it will be necessary to name a proxy as successor to Dr. Johnson. For that reason, I am enclosing the form—identical to the one signed May 8, 1956, naming Dr. Johnson as the proxy for your Society—this is to be completed and returned to me before the October 20 session, at which time the shareholders will meet to select a Director to fill Dr. Johnson's term which expires next June, prior to the annual meeting of the Board of Directors.
>
> Since Dr. Johnson was also a member of the Advisory Committee, it is necessary that we conduct a special poll now asking for nominations of a physician to complete Dr. Johnson's unexpired term. The By-laws provide that the members of the Advisory Committee, who serve for five years, may be reelected once. Dr. Johnson having been reelected in 1959, his second term began January 1, 1960, and would have expired December 31, 1964. The By-laws provide that the five members of the Advisory Committee are selected by the Directors from nominations made by the member journals. One member is chosen each year, from the names of the two candidates having the highest number of votes from the authorized representative of each journal. Dr. Johnson was the representative casting the ballot for your publication. Under the present circumstances, we are addressing the letter and ballot to you. Upon its receipt, you may wish to consult Dr. William Prichard, your Acting Editor, or the members of your Editorial Board. The ballot—coming under separate cover—should be returned to this office no later than October 15.
>
> this now so that you may make plans if you are named the proxy.

PRESIDENT RHODES: The Chairman of the Board is out of the country, and there is no known date at which the Board will meet. It may be said that Mr. Barnes will attend this meeting and I presume that Dr. Prichard also; so it seems to me this Council could delegate either one of these gentlemen as the proxy instead of Dr. Johnson.

DR. STYRON: I move Mr. Barnes be named as proxy.

(The motion was seconded by Dr. Bridger.)

PRESIDENT RHODES: Any other discussion? If not, so many as favor the motion let it be known by saying "Aye"; opposed? Carried.

We have another letter from the State Medical Journal Advertising Bureau.

> Because Dr. Johnson's term as a member of the Advisory Committee does not expire until December 31, 1964, it is necessary at this time to send you this Special Ballot. According to the By-laws, since there is now one lay member of the Advisory Committee, only physicians are eligible at this time. Enclosed is a list of the eligible candidates all of whom are editors or business managers of member journals.
>
> As the authorized representative of your Journal, please indicate your selection of one candidate—to fill Dr. Johnson's unexpired term, ending December 31, 1964—and return the ballot in the envelope provided no later than October 15, 1963.

DR. BEDDINGFIELD: I move Mr. Barnes be delegated to mark the ballot and return it.

(The motion was seconded by Dr. Johnson.)

PRESIDENT RHODES: So many as favor the motion let it be known by saying "Aye"; opposed? So ordered.

Consider Mecklenburg County Medical Society letter communication on roster structure for 1963.

MR. BARNES: In a nutshell, it is simply this: That we publish a roster at the end of the year in order to include all of the members with standing during that year, and you couldn't publish it any other time of the year. Probably you could publish it in July, but you would have a lot of new members that come in after July that would not be included in it.

They want the officers for next year, that is 1964, that will go into office January 1 published in this roster. It is almost necessary to publish the current officers of the County Medical Society, and it will be a departure in policy if we publish two sets of officers, and I think there would be some confusion in it. They have made this request of us, and there is nothing to do but bring it to you.

PRESIDENT RHODES: What will we do with it? I can see their point, but at the same time I believe it would create a great deal of confusion.

We appreciate your promptness in wiring us about Dr. Johnson. All the Chicago newspapers carried items—in the Deaths Elsewhere column —several paying tribute to his long service as editor and in the field of geriatrics. Mr. Jackson sent a telegram to Mrs. Johnson on behalf of the Board and Journal staff.

As soon as we learn the name of the proxy for your Society, as secretary, I will issue the formal notice of the special meeting being called for October 20. This will be at the Sheraton-Chicago Hotel at eight o'clock, following dinner scheduled for six-thirty p.m. I am telling you

DR. BEDDINGFIELD: It is a traditional difficulty we have in getting the names of the new officers.

MR. BARNES: Up to March 1 of the new year.

DR. BEDDINGFIELD: I move that we continue the present policy.

(The motion was seconded by Dr. Kernodle.)

PRESIDENT RHODES: Any discussion? Those in favor indicate by saying "Aye"; those opposed? Carried.

Consider letter communication of Lenoir-Greene-Jones Counties Medical Society.

At the last regular meeting of our Lenoir-Greene-Jones Counties Medical Society, a resolution was made and unanimously passed that the State office be requested to inform all the component county medical societies at least sixty (60) days beforehand of all matters of importance to be brought before the House of Delegates so that adequate time might be available for adequate discussion and consideration by the local societies of these matters.

This resolution was adopted by the Lenoir-Greene-Jones Counties Medical Society primarily because it was felt that the local society should have been given more information and time for consideration of proposed changes in the Blue Cross program and because of insufficient information regarding the recent Mental Health Bill.

MR. BARNES: Now I respectfully point out that sixty days before the Council meets on the first day of May is the first day of March, and that the present committees are required to report by the first day of March in notifications when they are appointed in the summer.

Everyone knows that on the first day of March, we rarely have more than the two or three of the fifty-two committee reports. Now I don't see how in the world we can help you comply with this demand.

DR. BENTON: I move this letter be accepted for information.

(The motion was seconded.)

DR. WILLIAMS: Mr. Barnes, I was there when that came up. That is my local society, and they jumped down Fleming Fuller's neck and down mine for not letting them know what was going to go on in Asheville. I simply pointed out that things were not jelled at that time, and how could I let them know when we walk into the Council meeting, and here is a Blue Cross thing that has come out of the committee meeting a few days before?

I think if they understood the mechanisms of the Society, they would understand why we couldn't afford to do this.

MR. BARNES: We will be happy to write such an explanation in response, if that is the wish of the Council, but we didn't want to be coming back to them without your consideration.

DR. WILLIAMS: I think it would be good for them to have the facts in a letter of information sent to them, that is, that the membership does wish to be informed many times, and that the Councilor is certainly not an adequate channel to do so. He may be in long-range things through the year, but in acute things, he cannot be; and I think we have had that problem brought up in the Society and in the Council many times, and I simply reiterate it here for future thought whenever we do anything.

PRESIDENT RHODES: Certainly communication is a place where we often fall down, and we would like to improve it all we can, but there are certain limitations.

DR. BEDDINGFIELD: Mr. President, would there be any objection—and I think it would improve communication, since Council agendas are mimeographed anyhow, and we as Councilors get them about a week before Council meetings, so that we know what is going on—would there be any objection at all to sending a copy of the Council agenda to each county society?

MR. BARNES: I don't see any reason why you shouldn't.

DR. BEDDINGFIELD: They can let who they want to in their county society know about it, and then all of our transactions are open and aboveboard. They know the things to be considered, and you would take the onus of a clique rule away from us to a certain degree.

DR. BENTON: I move that it be accepted for information.

DR. GARRISON: When you send those things out, and they discuss them and pass on them and tell you what they want, they haven't heard the other side or heard the committee who has gone into it in detail.

DR. BEDDINGFIELD: They can affect the Councilors' vote.

DR. GARRISON: They would think you voted against them when you went down.

PRESIDENT RHODES: Does that include authorization of writing a letter of explanation?

DR. BENTON: If you want that.

(The motion was seconded by Dr. Bivens.)

PRESIDENT RHODES: Any further discussion of that motion? If not, so many as are in favor of

the motion let it be known by saying "Aye"; opposed? Carried.

DR. BEDDINGFIELD: I will make a motion to hear it discussed, but it strikes me as a good idea right off the bat—I move that at the time that the members of the Executive Council are mailed their advance copies of the Council agenda, that a copy be mailed to each county medical society.

(The motion was seconded by Dr. Hollister.)

PRESIDENT RHODES: Any further discussion? So many as favor it, make it known by saying "Aye"; opposed? Motion is defeated.

Consider recognition proposal related to Mr. Richard Nelson.

DR. BENTON: We started that thing in Washington. You know Dick Nelson has been sort of adopted by the Medical Society of North Carolina. He is a representative of the American Medical Association, and this being his favorite society, and he has been faithful, coming to practically every meeting we have ever had, we thought he would probably appreciate it if the President would get him a plaque of the Medical Society of the State of North Carolina, and at our next meeting, when he shows up, a small appropriate ceremony be held giving it to him. I so move.

PRESIDENT RHODES: We will have a design and draw it up.

(The motion was seconded by Dr. Johnson.)

PRESIDENT RHODES: Any further discussion of it? If there is no further discussion, so many as are in favor of the motion say "Aye"; opposed "No." Carried.

DR. BIVENS: I would just like to bring you the information that MEDPAC, AMPAC membership campaign comes over within the next ten days. I would like the Council members to support it and become members and urge the men you run into in your neighborhood to do the same.

PRESIDENT RHODES: This is a membership application for the North Carolina Family Life Council. They are requesting the organization to belong to this in a supportive way, and their statewide membership dues are $10.

I believe it is not the policy of this organization to take such memberships, has it been, Jim?

MR. BARNES: Very rarely. There has been the Safety Council.

PRESIDENT RHODES: Shall we take any action on it? What does the Council want to do with it?

DR. KERNODLE: What does the President recommend?

PRESIDENT RHODES: I believe in view of our past policy that we could not undertake to become members of all these organizations, because if you join one of them, you would be expected to join many others, I am sure. And so my feeling would be that this is something that we would not undertake.

(Such motion was made by Dr. Johnson and seconded by several.)

PRESIDENT RHODES: If there is agreement with the membership, we will consider it a dead issue.

There is one other matter which Dr. Kernodle reminded me of, and which had been thought of before; but as you know, Dr. Charles Bugg, who is Chairman of the Board of Health, is ill.

Some six months ago, he had an acute coronary occlusion, from which he was apparently making a satisfactory recovery, when he developed a hemiplegia, which for the moment was thought to be some type of thrombosis, but later was discovered to be a neoplasm of the brain.

He had a craniotomy done, and it was found to be an inoperable growth. I believe that replacement of Dr. Bugg would be the responsibility of the Council, but I don't believe we would take any action unless he resigned, or unless he was deceased. Am I correct?

MR. BARNES: I think you are correct.

DR. HOLLISTER (assumed the chair): Is there a motion before the floor now?

DR. KERNODLE: I move that in case a vacancy occurs, that the President fulfill that position for the unexpired term of the individual.

(The motion was seconded by Dr. Raiford.)

DR. KERNODLE: Fill it himself.

DR. HOLLISTER: Motion has been made and seconded that if a vacancy occurs on the State Board of Health that the present President of the State Medical Society, Dr. John Rhodes, fulfill that vacancy himself.

All those in favor? Opposed? John, you are elected.

PRESIDENT RHODES: Is there any further business?

DR. RAIFORD: Is there any reason why the meetings of the Executive Council couldn't start at nine a.m. instead of ten a.m.?

(The meeting adjourned at six o'clock.)

SUNDAY MORNING SESSION

January 26, 1964

The Executive Council Meeting of the Medical Society of the State of North Carolina convened in the Crystal Room of the Carolina Hotel, Pinehurst, North Carolina, at nine-thirty o'clock a.m., President John S. Rhodes presiding.

PRESIDENT RHODES: Gentlemen, let us get started.

I will ask Dr. Paschal to give us the invocation.

(Dr. George W. Paschal, Jr., rendered invocation.)

PRESIDENT RHODES: I will ask Dr. Styron as Secretary to call the roll.

(Dr. Styron then called the roll.)

DR. CHARLES W. STYRON (Secretary): A quorum is present.

PRESIDENT RHODES: Thank you, Mr. Secretary.

Gentlemen, I want to welcome those who are visiting with the Council today and I hope thay will feel free to express themselves when they are called upon.

I would like to present to our Council Miss Withers who is now reporter to this Council and we are glad to have you, Miss Withers.

We have an agenda which we hope we can move along. We want to adhere to pertinent facts and the first thing is the reading of the minutes of the previous meeting in September, September 29th.

DR. PASCHAL: Ladies and gentlemen, I move that we dispense with the reading of the minutes and approve them as they have been recorded.

DR. T. S. RAIFORD: Second the motion.

PRESIDENT RHODES: The motion has been made and seconded.

As many as favor the motion let it be known by saying "aye." Motion carried.

I believe it is appropriate at this time to introduce to the Council Dr. Robert Prichard, who is the Acting Editor of our Journal, and I will ask him if he will stand so the Council may recognize him and also I will ask you to make any comments in relation to the Journal.

DR. ROBERT W. PRICHARD (Acting Editor North Carolina Medical Journal): Thank you, Dr. Rhodes. My only comment is that the Journal has turned out to be more work than I had suspected when Dr. Wingate was running it. Of course he ran it without much difficulty, having done it for so many years.

I notice Mr. Barnes told us in the proceedings of the meeting of the State Medical Society Journal Editors in October. Dr. Wingate was on the Board of this organization and they met shortly after his death. The apparent main topic at that meeting was advertising and I have a few figures that might interest you. I think they are of concern to this Council because it indicates what the future is going to bring.

A man from Abbott pointed out that the cost per thousand readers in different journal media was $58 per thousand for (the 34) state journals, $18.50 in the AMA journal, and $14.30 in the Medical Economics Journal.

Another man from Lakeside Pharmaceutical Company gave somewhat different figures and I do not know how to reconcile them. He said the cost per thousand for a black and white page, he divided them, of advertising was $17.75 for a state journal, $6. in Modern Medicine and $11.15 in Medical World News, and for a color page roughly twice as much. In the state journals $33 where it was $7 in Modern Medicine and $12.70 in Medical World News.

These people seemed to approach the value of state journal advertising on, as I suppose is proper, a strictly business basis. Several of them said they did not think the element of good will entered into advertising. That is, they were not going to ingratiate themselves with the people in a certain area by advertising in the journal.

I gather that we should look forward to less and less support from advertisers. By "we," I don't mean necessarily North Carolina Medical Journal but state medical journals in general.

Thank you.

EXECUTIVE SECRETARY BARNES: I think, for clarification, Dr. Rhodes, these rates, of course, are a combined rate for 34 journals and when an advertiser at the national level is talking about buying a page of ads and comparing the control circulation journal rates, of course, they are talking about in their case one page and in the Bureau of Journals they are talking about 34 pages, you see.

So it does pale down somewhat into the comparative per journal cost which is not as bad as that picture would depict.

PRESIDENT RHODES: Thank you, Dr. Prichard.

Does anyone have any comment about Dr. Prichard's remarks? It is obvious that we have had a decline in our revenues from our journal advertising and up to now at least there doesn't seem to be much evidence that the tide is turning.

EXECUTIVE SECRETARY BARNES: May I comment on that to say that we had a memorandum in the early days of January from the Bureau and they indicated to us that the subscription to national advertising in the 34 journals was down about 30 per cent for the months of January and February.

Of course, that is a new contract year and it may be that that is a decline that will flush out in the spring months. It usually does improve. But it is a pretty dejected picture to face 1964 with another 30 per cent decrease in advertising.

In addition to that, this same memorandum indicated that the Bureau which had been operating on a 14 per cent of the net revenue accruing from these national advertising accounts for the 34 journals was not sufficient to support the activities of the agency, despite the fact that they had cut their office space by 50 per cent and had laid off two employees. They still were in the prospect of being in the hole, and they were requesting the state journals to increase the allowable percentage for the Bureau up to 19 per cent.

If you consider that in advertising that the agencies which handle advertising for a given advertiser, of course, deduct 15 per cent for their services in preparing the advertising and the plate and also, if the advertiser pays his bill within 30 days, there is another two per cent. So, with this combination of 15 and 2, which goes to the agency handling the individual advertisement and the 19 per cent that the Bureau is requesting, you see it is again cutting into the dollars that we get at the state level.

Of course, there has been no meeting of the

Editorial Board. I have sent this information to Dr. Nicholson as Chairman of the Board and I feel that the Board should meet early in this year and survey what the fiscal situation is and decide whether we are going to go for this 19 per cent, or if we are going to get out of the Bureau and attempt some sort of sales undertaking of the advertising direct from the advertiser for this North Carolina Journal.

I think there would be a lot of problems in it. It would be a new undertaking for us, and I think that the consideration of the Editorial Board ought to be very careful in making the decision as to what we will do in the North Carolina Journal.

PRESIDENT RHODES: Thank you, Jim.

This is brought primarily for information to the Council. If there is any comment, we will be glad to have it.

(No response.)

If not, we will move along. I am going to recognize Dr. Roy Norton, Director of the State Board of Health, for a report and statement, if he wishes, at this time.

DR. J. W. ROY NORTON (North Carolina State Board of Health): President Rhodes. We have recently, that is on the 9th, had a meeting of the Board of Health and as you know Charlie Bugg was President of the Board and in his place, of course, at the meeting was our State Medical Society President John Rhodes. It was a time for us to reorganize from the standpoint of our officers.

Lenox Baker was chosen as President, John Bender was elected as Vice President, and other members of the Executive Committee are Dr. Glen Hooper of Dunn, Dentist, and Dr. Ben Dawson, Veterinarian, of Gastonia. In Dr. Roger Morrison's place, of course, you know that Dr. Raper of Asheville took his place, Mr. Koontz took Mr. Jackson's place as pharmacist. Mr. Koontz is from Chadbourn and Mr. Jackson was from Lumberton.

The Board also followed the lead of the National Society in going ahead and approving the oral polio vaccine. Prior to that, the Board had only approved it for use in children who were entering school for the first time, and at this meeting general approval was given.

Also just recently we have had the Surgeon General Committee Report on Cigarette Smoking, which, as you know, was just a study and evaluation of around 8 to 10,000 reports that had previously been made, many of which were reports on research and it was more or less a summarization and evaluation of those reports.

Our President was called on for a statement with regard to it. I was called on for a statement on it, but since I delayed long enough to read the report a little bit more than I had at the time I was called on, when I called back why he had cancelled the call. So I did not have to make a report on it, which I think was no loss to anybody at all because I think that our President spoke for those of us who are doctors in the state very well.

PRESIDENT RHODES: Thank you.

Dr. Styron.

DR. STYRON: Roy, there is something that I intended to call you about, a statement which appeared in the newspaper about the influenza vaccine and you were quoted as saying it was of questionable value.

Now, in the meantime, we had been advised by others, professional sources, not drug sources, to use this vaccine routinely. For example, I can remember just two weeks ago that I read in the New England Journal by the New England Health Department that they advised all patients with diabetes, with pregnancy and with any disease of the aging to be certain to get the vaccine this year, although an epidemic was not expected.

Then shortly on the heel of the statement that you had made a statement came out from a national source stating that even though—in the newspaper —an epidemic was not expected that people were in general advised to get boosters of the influenza vaccine, if they had not had it, to be sure to get it this year.

This created no problem for you but I can assure you that when I have perhaps a bank that I am giving 300 vaccines to and the directors of the bank read this they want to know just what is going on, and they usually are quite willing to take our advice on the basis of the information we have, but I can assure you they do call and ask the question, Just what does this mean, and we have to have some means of documenting this.

I would like to hear your comment on this.

DR. NORTON: I do not recall that we have ever had a situation such as this in which there was 100 per cent unanimity with regard to attitudes toward it. In other words, there is still no 100 per cent unanimity toward Sabin vaccine or toward influenza vaccine or even smallpox vaccine. We do not have 100 per cent unanimity on that or typhoid or diphtheria.

So my statement was not one in which I endorsed it, but I do not recall seeing the newspaper account, but I remember that I was talked with; what I did say was that, since there is relatively little reaction from it in most cases; very little real hazard from taking it, such as the hazard that we have from taking rabies vaccine, we'll say, we would hesitate a long time before we would recommend that because there have been definite cases of paralysis and even death dirctly traceable to it.

But in the case of the influenza vaccine and since we have had the recommendation for so many years, and we have had so many reports that indicate that it might be useful, particularly when we can use the specific type vaccine that is current in the community, I did not feel that this report that had come out should cause people to stop

giving whatever protection there may be, if any, to those people for whom it had been recommended before.

I would like, with your permission, President Rhodes, to give Dr. Koomen a chance to comment briefly on this because he does keep current with this much more closely than I do.

PRESIDENT RHODES: We would be happy to hear Dr. Koomen.

DR. JACOB KOOMEN, JR.: Thank you. President Rhodes, gentlemen. The pronouncement, of course, created great problems for us too, not so many perhaps as for you.

The situation was that I think all of the workers in the main strongly supported influenza vaccine and were aware of the fact that perhaps the protection is never more than, even strain-specific protection is perhaps never more than 70 per cent, also aware of the fact that the tens of thousands of people who died, many of them it is true at the end of their life span, of influenza might not have died had they been immunized.

Things were going along very well until Dr. Lanier evaluated his data as of the last winter, and you will recall that North Carolina was the first State accredited agency for these particular years which also had influenza B the year before.

His data showed that the vaccine then being used was ineffective. That is ineffective in the 70 per cent range. If you give any of the A strains, all of them overlap a little and there is some protection, perhaps 45 per cent or so.

At any rate, this was picked up eagerly, I think, by the various people who did not believe in influenza vaccine, in the news media and interpreted by many to mean that this was no good at all, a feeling which most of us do not share, and the reason being, as we know, that there had again been a strain change in the A family occurring just so frequently, and this means, of course, that the new vaccine must have incorporated in it the new A strain. This has been done.

We hope, therefore, in the future that this vaccine will again rise to a 70 per cent protective level. I personally feel that for all those over 65, perhaps those above 54, and perhaps even those above 45, the current influenza protection is a fine idea, especially if there is a chronic disease of heart or lung, or Addison's anemia, diabetes and the other diseases which we know cut down in general ability to resist infectious diseases.

It is not expected and none of us, you and I do not expect we will have an outbreak of influenza this coming year of either the A or B types. We have just been visited by A and two years ago by B, which has had a somewhat longer, say, a four to six-year start, but as protection of the aged and those with chronic disease, now that the new strain has been incorporated, I think we would feel very strongly that this immunization should be done, in those that we consider susceptible.

Charlie, does that answer the question?

DR. STYRON: It does. Really, I suspect that you were, in a sense, misquoted because this statement attributed to you in the newspaper was a blanket denunciation of the vaccine, and this was very strong and very definite and, of course, this answers it. This is one reason I didn't call you direct.

DR. NORTON: I don't believe I saw the article.

DR. STYRON: Often the statement attributed to one is not really the whole story. I simply explained to the people my point of view on the basis of the information I have, which is pretty much the same as you have indicated here and certainly answered the question. But it created quite a good deal of difficulty.

DR. T. S. RAIFORD: Mr. President, may I ask Dr. Koomen a question?

PRESIDENT RHODES: Dr. Raiford.

DR. RAIFORD: What is the relative merit of the two shot, three shot, what-have-you? In other words, what is the recommended dosage procedure?

DR. KOOMEN: Ordinarily the protection against influenza is short-termed, due to the fact that the base of action is right at the bronchial epithelial level and it is a matter of how much antibodies are put there. This means, generally speaking, that influenza immunization exists for from four to six months. We think those who have been previously immunized and those who have had the disease naturally can get along with a single dose given them in the fall for that season, to be repeated annually.

For those who have not been previously immunized, then we recommend two doses.

DR. RAIFORD: In other words, two doses as a starter—

DR. KOOMEN: Two doses as a starter.

DR. RAIFORD: —this year.

DR. KOOMEN: Yes.

DR. RAIFORD: Next year one dose per year.

DR. KOOMEN: One dose per year early in the fall.

DR. RAIFORD: Thank you.

PRESIDENT RHODES: Are there any other questions of Dr. Norton or Dr. Koomen?

(No response.)

I might make a comment about the report of the Public Health Service on smoking. We asked that each one of you be sent a copy of this report.

I would say this, that I had a call and the only call I had from the press was from the Greensboro Daily News.

I simply said that this report had to be studied and that the impression that I had gathered from the Public Health Surgeon's report would be that further research was indicated.

The question that now comes up at this time: Whether or not this Council wants to make any public statement about this matter.

It seems to me and my own personal reaction would be that there is no good reason why we should make any statement at this time, because I do not think there is any question but that this is going to incite a great deal of research activity.

But if there is any disposition here in this Council to take any action on this, why, now is the time to be heard. If not, we bring this simply for information.

Jim has suggested maybe we should have a committee to review the report and bring us back a recommendation at the next meeting or a commentary.

EXECUTIVE SECRETARY BARNES: I would like to say, Dr. Rhodes, that you asked me to secure and have this report sent to each member of the Council, and we communicated with the Surgeon General and his response was that every physician in America would receive this report in a few days and that such were not available to us at that moment, and referred us to the press stories and summary that appeared in the New York Times.

So we made the effort to get these reports for the Council but were not able to do it.

PRESIDENT RHODES: So evidently they did send them out.

Do I hear a motion that we do or do not appoint such a report review committee?

DR. WILLIAM A. SAMS: Mr. Chairman, I cannot see the use for a committee, because we've got to await further research and further reports as to cause and effect.

PRESIDENT RHODES: Dr. Kernodle.

DR. JOHN R. KERNODLE: Mr. President, I would like to mention the same thinking that Dr Sams has.

My feeling would be to let everyone review this and I suggest that we review it individually and then discuss it opening at the next meeting if we feel like it and then we will not have any action.

DR. STYRON: My comment would be that a committee report couldn't be anything but a book review.

PRESIDENT RHODES: Will you make a motion to receive this information?

DR. KERNODLE: I do.

DR. SAMS: I'll second it.

PRESIDENT RHODES: Any further discussion?

(No response.)

As many as favor the motion make it be known by saying "aye."

(A chorus of "ayes.")

Opposed?

(No response.)

It is so ordered.

We will next have the Report of the Chairman of the Finance Committee.

Dr. Wayne Benton.

DR. WAYNE J. BENTON (Chairman, Finance Committee): Our transactions for the year 1963 were very commendable, I thought. In effect, we started with a $22,000 budget deficit and ended up with a $7,430 deficit. To look at it a little different and add the amount of money received from our investments and subtract that amount then we end up with a $900 deficit. So starting with a $22,000 deficit down to $900 is a real good job for the chairman and his department, plus the commissioners and the committee chairmen in holding down the expenses.

Our income last year, of course, was off from what we had anticipated. One reason was due to the fact that we did not have the polio funds that we had expected and then advertising was off in the journal and several other reasons. But we did real well for the year and we are still financially sound, solvent.

I went to the broker and looked up the performance charts on our open-end mutual funds and compared it with the other open-end mutual funds in the country and ours hit almost halfway in between.

I see no reason to make any changes.

I am glad you mentioned the Journal. I don't know what to suggest but I still want you to think about it.

The other item I want to bring up, you know every other year is a legislative year and our budget was thrown out of kelter because of that. We would recommend that you of the Council consult with our legal counsel to see if we cannot employ him on an annual basis, and then give us a list of what we can expect from him for these services.

If we could pay about the same amount every year and have a contract with him it would help us budget-wise.

That completes my report unless there are any questions.

PRESIDENT RHODES: Thank you, Wayne.

You have heard Dr. Benton's report. It is open for discussion.

EXECUTIVE SECRETARY BARNES: Dr. Benton, I would like to comment that according to the quotations of the asset value of our shares, Friday they were quoted at 11.74 bid and I believe that is within something like 20 cents of the highest asset value that this particular set of shares has ever had since we invested in it back in '57 or something like that.

So it is not as bad as it looks.

PRESIDENT RHODES: I think it might be pointed out too, Jim, that one of the reasons our deficit is not so great is because we had an increase collection over our anticipated dues revenue of somewhat better than $4,000.

EXECUTIVE SECRETARY BARNES: For 1963. We did a real diligent job and we feel that we have at least 99 per cent of the eligible people in the state.

PRESIDENT RHODES: I think Jim and his staff are due considerable commendation for the way in

which they have been able to operate this past year in the face of what was anticipated as a considerable deficit.

PRESIDENT RHODES: We are talking about the financial report of Dr. Benton. Is there any further discussion?

DR. SAMS: I move that it be received.

DR. FRED G. PATTERSON: Second.

PRESIDENT RHODES: The motion has been made and seconded. Is there any discussion?

(No response.)

If not, so many as favor the motion let it be known. (The motion carried.)

One of the important committees this year in our activities is that which relates to the implementation for the expansion of the mental health program in North Carolina and I am going to ask Dr. John McCain, who is the Chairman of this Committee on Mental Health to cover items 6 and 10 in our agenda.

DR. JOHN McCAIN (Chairman, Committee on Mental Health): The Mental Health Program for 1964, General Description: The practice of providing mental health facilities at the local level, where patients can seek help earlier, get well quicker and return to productive living sooner, is emerging as the medically preferred trend for the treatment of the mentally ill. The family physician stands on the threshold of capabilities for management and control of the mentally ill, through the use of drugs and psychotherapy, similar to earlier developments for the better management and control of the diabetic, cardiac and epileptic.

There is no reason why mental illness cannot be treated like any other illness in the doctor's office or in the local hospital if necessary. What the mental patient needs as much as drugs and techniques is a good therapeutic environment. Nothing can be more homelike than his own neighborhood and friends in recovery from mental illness. County Medical societies will have to assume a greater responsibility in the maangement of these patients.

Program underway: Through a special grant from the AMA Department of Mental Health, a Program Guide for Mental Health Committees is now being printed and will be available for distribution soon. This guide will describe the Mental Health Program of the Medical Society and the responsibilities of the Mental Health Committee and each of its separate members as indicated below.

A special Conference for Mental Health Committeemen is to be held at the Sir Walter Hotel in Raleigh on Saturday and Sunday, March 14 and 15th with a most informative program planned and an outstanding faculty being engaged.

Suggestions: Designate a member of your society to provide the leadership in the formation of the Mental Health Council now being formulated of other disciplines and interests for your county. These local Mental Health Councils have been given the important responsibility of working with other county agency representatives to survey the mental health resources in the community and project a plan for mental health services in the county for the years ahead. Physicians need to be involved in this planning for the future. It is important that your representative to the local Mental Health Council, when formed, also be a member of the Mental Health Committee of the County Medical Society.

Your medical society should have a Mental Health Committee composed of a chairman and preferably at least five additional members with the following designated areas of responsibilities:

A—Physician Education,

B—Public Education,

C—Children's Services,

D—Alcoholism,

E—Medicine and Religion, and

F—Notify the State Society Office, preferably within the week, of all the members on this Committee so that their names can be included on the headquarters mailing list for one or more designates to be invited to the special Conference.

Encourage good representation from your County Medical Society to the Conference of County Medical Society Mental Health Committees to be held at the Sir Walter Hotel on March 14 and 15th.

The Mental Health Committee has recommended that the County Medical Societies appoint a mental health committee with a chairman and four or five members in each county medical society on the mental health committee. The mental health committee or the medical society have worked out a fairly detailed mental health program for the state which will be carried out through these local mental health committees.

This has been written up in booklet form and we are real pleased that the AMA has given us a grant to have this put into print.

Also, on March 14 and 15 we are to have a meeting of the County Medical Society Mental Health Committees at the Sir Walter Hotel in Raleigh at which the mental health program of the Medical Society will be explained to these mental health committees and they will be told how to implement it at the local level.

If there are any questions about the program, I would be happy to answer them.

PRESIDENT RHODES: Thank you, John.

As you know, the State Board of Health has had in operation a number of mental health clinics in North Carolina for some years and with the enactment of legislation in our last general assembly to set up a mental health authority these clinics have been transferred to the mental health authority.

Some of our counties are already quite active in this area and I think John Kernodle might have some comment about what's going on in Alamance in this regard.

DR. KERNODLE: Our County assumed the obligation of an authority and the County Commissioners appointed an Advisory Committee and an Executive Committee of the character that you have outlined.

We have employed a psychiatrist and a social worker and opened, effective in about 30 days, a mental health center. All the ground work was laid for this two years ago by a pilot study of abnormal and mentally deficient children in our city and county school systems through the Research Department of Dr. W. M. Richardson and the Public Health School at Chapel Hill. So we have had the ground work behind us and we have moved very rapidly into this area.

PRESIDENT RHODES: Thank you, John.

Any further discussion of this report?

DR. PASCHAL: Mr. Chairman, I would like to inject here or inquire here if this is the place to ask this committee about the rejectees that we have for the Armed Forces, and if they have any particular plan about studying these rejectees in North Carolina and what they propose to do about perhaps screening them and providing them with advice?

PRESIDENT RHODES: I believe there is a pretty high percentage of rejectees. Isn't that true, George?

DR. PASCHAL: There is. It is high and it is distressing actually. It is well over 50 per cent. I do not know whether this is the place for it or not but it seems to me that medicine in North Carolina has a very definite responsibility to these people, and I do not believe that we ought to wait until they get 18 years of age to start screening them and finding out that they are not eligible for duty in the Armed Forces.

It involves a big segment of the population and I think that we can possibly do something beginning even in the first grade to protect these people who might turn out to be ineligible at the time of induction.

It is pointed out, I think, in general statistics that only about 14 per cent of them are rejected for purely physical ground, a higher per cent, well over 50 per cent, are rejected because of what they say is mental grounds. It does not necessarily imply that they are psychotic and it is not a psychiatric problem but it is an intellectual insuffiency and I think we as doctors ought to consider this problem seriously and make some effort to see that our educational programs are so implemented that we can avoid this sort of thing.

PRESIDENT RHODES: I might say that the North Carolina Mental Health Council, which will have a great deal to do with the implementation of this program, through a grant has instituted already a survey of the needs in North Carolina on the community level.

To try to come up with some answers perhaps to what you have talked about.

John, do you have any further comment?

DR. McCAIN: I think that that is one of the many perimeters that can be identified to establish the severity of the mental health problem in North Carolina. This is new and this is very dramatic and it can be handled, I think, a great deal through the improved services for children by catching it early and working through the families.

As you indicate, more drop-outs in the schools are because of social incompetence rather than intellectual incompetence. This is something that is remedial and it has been the feeling of the Mental Health Committee that this responsibility should rest with the family physician, a large part of this, for the mental ill problem in the United States and in our state, and this would be encompassed in what we have to do.

We must establish a program in North Carolina with the family physician's aid to find these things early and initiate the proper treatment.

PRESIDENT RHODES: Dr. Norton.

DR. NORTON: I feel very strongly, along with George, that it would be very helpful to everyone if the Medical Society Committee would give this some very careful thought and make some constructive and helpful suggestions to everyone else.

I think that it is a problem in which it would be good for the Medical Society to take the lead. After all a large part of this is medical even though only 14 per cent is designated as strictly physical. We are involved in more than physical.

So I think it would be very helpful.

PRESIDENT RHODES: Amos.

DR. AMOS JOHNSON: Yes, sir, at the risk of getting up too often, I want to acquaint you all with the fact that the American Psychiatric Association and the American Academy of General Practice have funds and are in process of implementing a very practical program to upgrade the quality of psychiatric appraisal that general practitioners or family physicians will be able to give to their people for whom they are assuming the responsibility for medical care.

This is being implemented by the two organizations themselves working in conjunction and presently what John McCain spoke to will be in the matter of becoming a recognized fact and training will be given towards that.

One other little thought. There is so much of our mental disease and mental incompetence that is almost beyond the remedial stage that John McCain spoke about. It is impressed on me every day, when I see people I have known all my life and see their offspring, that you cannot cut a board from a knotty loblolly pine log and have it come out to be heart long-leaf pine.

(Laughter.)

PRESIDENT RHODES: That's a very impressive statement.

Thank you, Amos.

Dr. Beddingfield.

DR. EDGAR T. BEDDINGFIELD, JR.: First, a short adendum to this discussion. In one of the news letters that the Legislative Committee gets out of Washington with little things that are going on, I noticed that within the last week President Johnson has directed the Defense Department to proceed with the physical examination of all selective service registrants at age 18.

Heretofore, as I understand it, a boy might have a legitimate reason for being deferred, educational reason, family hardship reason, dependents, farm work, et cetera, and they waited until his reason for deferment had exhausted itself and then sent him down for examination.

In the new policy, as I understand, it provides that all registrants will be examined immediately after registration, or as soon as possible thereafter with the idea of picking these defects up. They really ought to be picked up before 18, as you suggested, Dr. Paschal, but that they would at least be picked by the Selective Service so they would know what their manpower pool of physically and mentally draftable people was going to be and that the others would be referred to public and private sources for any possible remedial care.

PRESIDENT RHODES: Thank you, Ed.

Dr. Kernodle.

DR. KERNODLE: George, in regard to your comment in this particular area, I would like to bring to the attention of the Council the North Carolina Fund which is a $14 million proposition over a five-year period. In this fund there are many projects being compiled at the moment.

In all of these projects they have asked on the local level for evaluation of health and economics and why the poor poverty-stricken people are mentally deficient and so forth when they get to the age of 16 or 17.

So I am sure that this program, wherever it is filed in the 10 areas, will involve the type of thing that you are asking for, and I think that we cannot wait until the 18 years old examination to find this, you have got to get back to the youngster in the two and three-year old group.

There was a program of research that was done in Alamance County two years ago which brought this out.

So this North Carolina Fund is going to do just what you're talking about in our state, I am sure, in certain areas.

PRESIDENT RHODES: It is pretty obvious that this program has broad implications to medicine and it certainly is our responsibility to see that leadership is provided not only on the state level but certainly and more importantly on the local level, the community level.

Any further comment?

(No response.)

If not, do we have a motion about this report?

DR. PASCHAL: I move it be accepted and approved.

DR. BRIDGER: Second.

PRESIDENT RHODES: The motion is made and seconded that we approve, accept and approve this report of Dr. McCain. Any further discussion?

If not, so many as favor the motion make it be known by saying "aye." It carried.

Thank you, John. We appreciate your comments.

DR. FRED G. PATTERSON: One minute, John. Back last meeting you asked me to get a report on the research work that was being done by Dr. Smith and his group at Chapel Hill.

PRESIDENT RHODES: That's right.

DR. PATTERSON: He sent me a letter which I sent to Jim Barnes. The letter didn't explain much to me, but I see that John is on that group so he can explain it to us, if he would. I think it would help clarify that.

DR. McCAIN: The North Carolina Mental Health Council is a group organized at the request of the Governor to advise him on legislative matters.

As Dr. John indicated earlier a matching grant of federal and state funds has become available to implement a program of planning for mental health facilities at the local level. The responsibility for implementation of this program has been given to the North Carolina Mental Health Council, through Dr. Norton.

The North Carolina Mental Health Council is to implement this planning for mental health in North Carolina. Dr. Harvey Smith (Ph.D.) has been engaged to handle this project.

The program that they have outlined is for the formation of county mental health councils at the local level. This will be a mirror image of the mental health council at the state level in that the local mental health council will be comprised of representatives from various organizations and agencies in the county, one of which would be the medical society.

We are really pleased that the president of the county medical society has been asked to name the delegate to the county mental health council and to have the responsibility of forming it and getting it started.

This county mental health council will survey the local mental health services available and develop a program for that county which they feel will satisfy the needs for the years ahead.

These individual reports from the various county mental health councils will be compiled and sent to the North Carolina Mental Health Council which will then in turn through Dr. Smith, develop a comprehensive mental health program with the state for the years ahead.

PRESIDENT RHODES: Thank you.

Dr. Patterson.

DR. PATTERSON: I have no more comment. I think that explains the plans that the research group had in mind. I think they were a little frightened about what sort of research was coming out of certain areas.

PRESIDENT RHODES: Do you have any further comment?

DR. McCAIN: No, except there is a little confusion about the mental health council representative from the county medical society. He should be a member of the county mental health committee. The mental health of the local community is certainly a thing for the future, people want to get treated at home where they can receive treatment earlier and get well quicker and return to productive living sooner, and I think that medicine needs to be involved and we need to give it direction.

DR. KERNODLE: I would like to get a question in for clarification. Is this under Gene Hargrove's authority?

DR. McCAIN: No, sir.

DR. KERNODLE: Smith and Lawler who are heading up this request for the council have their offices there.

DR. McCAIN: Dr. Hargrove happens to be Chairman.

DR. NORTON: He happens to be Chairman, and he had some extra rooms in his new office building on Hillsboro Street, so he allowed them to use this until they could find other quarters.

DR. KERNODLE: I would like to point out another thing and re-emphasize the fact that every one of these councils are being formed as recommended by the president of the county medical society. This information is all directed to the president and that does give it medical orientation.

DR. McCAIN: We are real pleased about the cooperation that this new N. C. Mental Health Planning Council has given to medicine and they have accepted our leadership in this and have asked us to provide the leadership, and I am certain that the county medical societies will give direction to this effort.

EXECUTIVE SECRETARY BARNES: It is clear then that the county mental health authority is a legal entity and this is a survey or research entity of the North Carolina Council of Mental Health which the Governor appoints, so they are both official but the local mental health authority will have administrative authority ultimately and this local council on mental health simply will be a planning and advisory group.

PRESIDENT RHODES: Thank you.

I believe we can accept this addendum as information. We do not need any action on it.

Would you like to comment, Dr. Raiford, on the National Workshop of Presidents and Officers?

DR. T. S. RAIFORD (National Workshop Conference of Presidents and Officers of State Medical Society): Mr. President, I give the Council this just brought to you simply as information. I will try to give you a very brief resume of the chronological order of events and where it now stands.

Last May in Asheville I had the opportunity to talk with Dr. George Fister and in the course of the conversation I made the remark that it was a shame that the Presidents and other Officers of various state medical societies do not have the opportunity to get together and exchange ideas at a level somewhat lower than those ideas that are promoted at the AMA Meetings.

He thought the idea was very good and asked me a few questions about what I had in mind and so on. I didn't have much of a coordinated idea, but during the conversation sort of a rough plan evolved and a few days later I got a letter from Dr. Blasingame saying that Dr. Fister had talked to him about it and would I please put these ideas down on paper.

It began to get out of hand a little bit so I talked to John and Jim about this thing and we sort of proposed a formula for the purpose and the mechanics of this thing, the general idea being that there would be sometime during the year an opportunity, whether it was a half day, or day or day and a half meeting or workshop, to include the Presidents-Elect, the Presidents and the Immediate Past Presidents specifically as active participants.

This idea was then followed up by a presentation before the existing somewhat similar organization in name which is called the Conference of Presidents and Other Officers of State Medical Associations. That organization puts on a program on Sunday afternoon at the June Meeting of AMA and is quite a very valuable and informative session.

However, the officers, the council, of that particular organization do not include current officers of the state organizations and it therefore does not give them an opportunity for being heard.

This was again presented at a breakfast meeting at Chicago in August at which time about 22 or 23 presidents of state medical associations were present and the general feeling was very euthusiastic for it.

It was again presented in Portland before the Council of the existing organizations which sponsors the Sunday afternoon program, and it was a very polite and quiet by-pass by being referred to a committee within that council, which means status quo, stay put.

I have had the opportunity to talk to Dr. Fister and to Dr. Bornemier who both advise that this thing, this idea be promoted completely separate from the existing organization. There is a little political innuendo involved in this thing. They have a very choice spot on Sunday afternoon and they were a little jealous of their position and did not feel like having another baby at this time.

It had been pointed out specifically in the agenda of the proposed project that this would not replace in any way but simply augment and supplement the activities of this conference.

So, as it stands now, Dr. Rhodes and I have talked about this on numerous occasions, and I have contacted six of the surrounding states, the presidents-elect who will be in office in June, that includes Maryland, West Virginia, Virginia, Ten-

nessee, Georgia and South Carolina, to see their reactions to perhaps an informal dutch treat dinner at some time during the AMA Meeting in San Francisco, not something that they must attend but those who happen to be there.

I would like to read to you just the description of one man:

"I agree with your inference that the Conference of Presidents and Other Officers of State Medical Associations is little more than a spoon-fed conference provided by the Board of Trustees."

So three of the four that I have heard from are very strong for this thing. We are at the point now of perhaps trying to talk to Dr. Blasingame or some other authority at the central office to help us perhaps arrange a purely informal, not organized, dinner where the presidents, both past and present and president-elect, will have a dinner to get together on this.

I simply pass this on for information as to what we have been considering and whether it is worth while to pursue. I do not believe we have had any implications of objections from the Board of Trustees of AMA. In fact, the grapevine says they are highly in favor of it. But that is the present status of it and we thought we would follow along with it a little bit more and see if it is worthwhile.

Any suggestions or questions you may have we would be more than happy to have.

DR. BEDDINGFIELD: Mr. President, I would like to ask Dr. Raiford if it would be of help to him in promoting this idea, whether any sort of an expression or resolution from this Council directed either toward the AMA Board of Trustees or to the AMA House of Delegates in the form of a resolution would be helpful, to make this an official AMA function, if this is the time to start such a resolution?

PRESIDENT RHODES: What do you think, Ted?

DR. RAIFORD: I don't believe so right now for the simple reason that this is purely informal and we do not know how the officers of the various state societies feel about this.

I might add that Dr. Bornemiere who was Vice Speaker of the AMA House and also on the Board of Trustees, is highly in favor of this and I could read you his letter, a personal letter I got about two weeks ago in which he strongly urges for this thing.

I would appreciate also the thought or expressions of the value of such a deal from anybody who felt like expressing them. Thank you.

PRESIDENT RHODES: Dr. Raiford, wouldn't it be entirely proper for this group to approve and thank you for your efforts to date?

DR. RAIFORD: I think that would be quite proper. Then if we had such a meeting, if it turned out that we could get even a partial quorum present at such a dinner in San Francisco, I could say our Council has been informed of this and thinks it's a good idea and stand back of it.

DR. HARRY JOHNSON: I would like to make such a motion.

DR. KERNODLE: I would like to second that motion endorsing the thought that Ted has brought forth and I think it is an excellent idea for stimulation and development, because it is a necessity in my mind to create an atmosphere for incoming officers.

PRESIDENT RHODES: The motion is made and seconded that this Council endorse the proposed officers conference suggested by Dr. Raiford.

I think it is very true and I am sure that those of you who have attended AMA Meetings will probably agree that so far as the state society officers are concerned it is largely a spectator sport and while that is real valuable we do not have the opportunity to communicate one with the other and discuss our own problems.

Do I hear any further discussion on this program?

DR. SAMS: Mr. President, it seems to me that this is endorsing something that is in its incipiency thus far and that we ought not to endorse something until further feeling around is done about it, as Ted says, and we know a little more about it.

DR. RAIFORD: I think it puts you on record as approving some type of mechanism by which the officers of the various state societies could have a free interchange of ideas, whether it be at workshop level or a dinner or whatever. It is simply approving the idea.

DR. SAMS: All right.

PRESIDENT RHODES: Any further discussion?

(No response.)

As many as favor the motion, make it known by saying "aye."

(A chorus of "ayes.")

Opposed?

DR. SAMS: No.

PRESIDENT RHODES: All right, Ted.

The next item on which I will report my action for your approval: I had a request from the president of North Carolina Licensed Practical Nurses Association to appoint a representative from the Medical Society to serve on an Advisory Committee.

She sent me a copy of the by-laws of this organization and it provides for a five-member Advisory Committee from organizations related, of course, to the nursing profession. They unfortunately did not delineate the other organizations. The Medical Society has been requested to appoint a representative and it seemed to me proper that we should have as much liaison as possible with the paramedical organizations and so I appointed Dr. Jack Hughes of Durham to serve for two years on this Advisory Committee.

I am presenting this to you for your approval or disapproval of that action.

DR. PASCHAL: I move that the action be approved.

DR. SAMS: Second the motion.

PRESIDENT RHODES: Any discussion?

If not, as many as favor the action or the motion will make it known by saying "aye."

It is so ordered.

Report of the Committee on Chronic Illness.

DR. THOMAS NICHOLS (Committee on Chronic Illness): Mr. President and Members of the Council: The Committee on Chronic Illness has had a fairly active year.

I do think that there are certain zones that you might have an interest in as to the activities suggested for this committee at the early part of the year. We had thought that it was wise to increase our contacts with other agencies using the CCCs which we mean to be an abbreviation for communication, coordination and cooperation of our various efforts; that is, with governmental agencies, private agencies and voluntary agencies.

We have carried that out. I shall not go into the details of it, they are available.

The second thing was to add judiciously through the state members to the committee and consulting group of our committee with the purpose of seeing that each area of this state is represented so that we can have and increase our contacts with county medical societies.

Dr. Kernodle and I discussed the fact that most of our representation four and more years ago was centered about the central part of the state with no representation along the eastern seaboard and none in the mountains.

I am sorry that I did not bring with me a map which the Raleigh office prepared through Miss Zeigler showing that each of our committee members is responsible for from four to six counties. While this is not operating at 100 per cent efficiency at the present time, for obvious reasons, we hope that as we go on we can have a direct route of contact into the county medical societies where most of the things that come before this committee, and I suspect before this society, needs to be. I think that organizational problem is probably completed.

We were to encourage the use of the guide to the establishment of home patient care and that has been, I would say, our major project of the year and it is through the mechanism of reaching county societies in the manner of which I have just spoken that we hope to get this guide before the county societies because it is in the county society and the general practicing physician that home patient care will originate, will develop or will fail.

I think that it needs the support in every way that we can get it to have physicians initiate this project in every community in which it is desired. The physcian should initiate it and, of course, he does control it.

We worked pretty hard, we have reached, I would say, 20 or 30 county societies. I have presented this before the local county societies in about 7 or 8 instances. Dr. Reece has been with me on a couple of occasions and in each instance we have tried to talk to these societies also about the state medical association, and it is surprising that these people in the county societies, friends of ours, know practically nothing about the things that go on at the state level.

We have continued our liaison with the Advisory Committee of the State Board of Health, particularly the Nursing Home Division. Dr. McLaurin has been very active in that instance and I think an excellent result has occurred.

We have encouraged the individual contacts with county commissioners under the direction, actually, of the Legislative Committee, Ed Beddingfield's group. Our committee members spread through the state have joined with the Legislative local men to speak before the county boards of commissioners and I have particular reference to the attempt to help in our legislation in the State.

I think that the 15 or 20 county commissioner groups who called, wired or wrote our representatives were helpful in the implementation of Kerr-Mills in North Carolina.

We have continued to maintain our contact with the county, local and state organizations and I have, rather than go into those, will say we have attended, or been represented or have held more than 21 meetings. We have at least three in the spring. The National Joint Council on Aging will meet in Chicago. We will be represented there. There will be a meeting in Atlanta and there is one other that I do not have available.

We have tried to beam the emphasis on this committee a little bit more towards professional interest in areas of need and also to broaden its interest in chronic illness not only in the matter of aging but including all ages. It is the belief of this committee that chronic illness occurs from birth until death and that we should spread our interest over this area, particularly since perhaps the majority of chronic illness occurs below the age of 14.

In addition to these, Dr. McLaurin has been working with the AAGP and has already produced what is called a shop talk, a strip film with sound on athletic injuries which perhaps many of you saw.

We have arranged to have another shop talk prepared on Patient Home Care.

The purpose of these strips I think has already been presented to this group. It is a method of reaching and producing discussions in the county societies and also in certain selected lay groups.

I think that our film on Patient Home Care will be fine program material not only for profes-

sional but for lay groups of interest.

About our organization, I would like to say that we receive from the Council on Medical Services of the AMA this guide outline on Medical Society Committee on Aging and Chronic Illness. This is a suggestion that they make or an outline for the development of these committees and their activities, I presume for the next two or three years, and I would like to read just two or three things about purposes.

The purpose is to develop effective and active liaison with other state and local groups concerning that needs that relate to chronic illness of the aging and educational programs to be stimulated to expand opportunities for continued good health, and so forth.

Then under Organization and Membership format, I will just read certain points of it. The committee should be enlarged to achieve the objectives of the program. Specific projects or areas of interest can be assigned to each member according to his interest leaving to the committee as a whole the consideration of broad policies including the program agenda and specific project assignments.

Every committee should include physicians who have special training and interest in those medical areas in which most of the common disorders occur, and they go on to enumerate cardio-vascular disease, cancer, arthritis, rheumatism, mental disorders.

I bring this up because we are about two years ahead of this. We have all of this in this committee which we started some time ago. In the September meeting and again last night we had the official appointment of seven subcommittees of the Chronic Illness Committee. They can be obtained from the Raleigh Office. Under heart disease, including vascular and renal disease, respiratory diseases, including tuberculosis and allergy, cancer, youth and adult education, nursing and boarding homes, accident prevention, patient home care and I am certain there will be perhaps two others that we will need before the year is out.

At our meeting Friday night we received for information, a report originating in the Department of Public Health at Chapel Hill, a developmental study of neurological and sensory diseases. This was ably presented by Dr. Charles Cameron and Dr. Francis McConnell. The committee was interested to know of their survey.

Now, at last, you will be glad to know, the committee at this meeting Friday night brought up two recommendations for this group. I will read as follows:

The Committee recommends to the Executive Council the Council's endorsement and full support of the Accreditation Program of the National Council for Accreditation of Nursing Homes, and

Further recommends the Council's endorsement of full and complete implementation of the Program as soon as is practical.

For information, the National Council on Accreditation of Nursing Homes is a joint venture of the AMA, the ANHA, the AMA having four of the seven members on this seven-member council and also the presidency of this council.

The majority of the funds to operate this Program are contributed by the AMA so that we can honestly say that this is medically oriented and directed. Furthermore the recently revised rules and regulations for the licensing of nursing homes in North Carolina are in general equal to or perhaps more stringent than the required standards for accreditation.

The standards for accreditation have just been released, I think we had them just before the meeting, and also the standards for state licensure.

Second, it is recommended that the Chronic Illness Committee indicate to Dr. Robert A. Gregg of the Department of Physical Medicine and Rehabilitation, Duke Hospital, its interest in and its support of the Department's studies of continuation of medical care in the Durham, Vance and Franklin County areas.

This committee urges the cooperation of individual physicians in these counties. It also requests Dr. Gregg and Mr. David Henry to keep the committee informed of the progress, the problems and many areas of need and assistance to assure the full and continued support of this committee.

Thank you, sir.

(Dr. Patterson assumed the Chair.)

CHAIRMAN PATTERSON: Thank you, Dr. Nichols. That is certainly a lot of work, a wide range.

Is there any discussion?

DR. KERNODLE: Mr. Chairman, I would move that the resolutions and recommendations of the last two subjects be made in the form of a motion and that they be accepted as worded to be passed among us by the secretary, for adoption.

DR. RALPH B. GARRISON: I'll second that.

CHAIRMAN PATTERSON: Any discussion?

(No response.)

All those in favor of Dr. Kernodle's motion, please say "Aye." (The motion carried.)

(President Rhodes resumed the Chair.)

PRESIDENT RHODES: We will now go to the Committee of Liaison with the Department of Public Welfare. I believe Dr. Johnson is here, Chairman of that Committee.

DR. AMOS JOHNSON (Chairman, Committee on the Department of Public Welfare): Yes, sir. I would say just a word or two and then turn it over to Dr. Ed Beddingfield. If you will note, this committee of which I was Chairman last year and Chairman this year, is the Committee on Liaison to the Department of Public Welfare. It has no status whatsoever as pertains to the Board of Public Welfare in the State of North Carolina. It is liaison to the Department and we can only work officially as within the bounds of directives

set up by the Board of Welfare of the State of North Carolina and there is where our problems are at present.

Therefore, Ed Beddingfield, who is much, much more conversant with this than I am is the proper person to give this report.

PRESIDENT RHODES: We recognize Dr. Beddingfield.

DR. EDGAR T. BEDDINGFIELD: Thank you, Mr. President. As all of you know, the enactment of substitute Senate Bill 8, which was the bill to provide medical aid to the aged and others in North Carolina by the 1963 General Assembly—we had hoped that Kerr-Mills and MAA, as we know it, would at long last become a reality in North Carolina. You will also recall from previous reports the issues that arose in the General Assembly, the people who opposed our view in the General Assembly as to implementing MAA in North Carolina, those opponents being led primarily by the North Carolina Association of County Commissioners.

The bill, as finally enacted, provided and directed the Department of Public Welfare to set up a program of medical assistance that would be more beneficial, in the words of the bill, to the people of this state. This allowed a certain degree of flexibility to the Board of Public Welfare in choosing which legislative route they would employ with the various matching fund federal programs.

You will recall that a full scope of medical services could be offered under the Old Age Assistance Program, the Aid to the Permanently and Totally Disabled and the Aid to Families with Dependent Children. Legally they could be offered.

You will further recall that the matching funds ratio under the Kerr-Mills Medical Aid to the Aged Program at the present time, for North Carolina, was 75 per cent matching federal funds, which would make 12½ per cent from the state and 12½ per cent from the county.

You may also recall that under the Old Age Assistance Program the state receives 80 per cent matching federal funds for a medical care program that might be evolved there under leaving 10 per cent each for the county and state.

This 5 per cent difference in matching federal funds has been a thorn in our side. This has been an argument that the County Commissioners have used against MAA.

After the legislature adjourned, through conversations with the Commissioner of Public Welfare here in the State and with the United States Commissioner of Public Welfare, Dr. Winston, we had reason to believe that they were in favor of an MAA Program. Their point of view, perhaps not for the same reason, but nevertheless their point of view coincides with our point of view. So we had hoped that we were going to have relatively smooth sailing and the MAA Program would be set up.

However, about two or three weeks ago the State Board of Public Welfare met and this did not come to pass. The Board voted to proceed to establish a program of medical benefits including the hospitalization that we already have, the drug program, the out-patient diagnostic program and dental care for those over 65 by expanding the benefits to the present welfare groups.

This means that these services could be available to the Old Age Assistance group, those that are receiving a monthly check, and also those that have been heretofore designated as a "no money payment" group, meaning that these were people who would be eligible for old age assistance but were not drawing it for one reason or another, but in the event of illness they could draw it.

This is a fine technical distinction. We had, for some time, figured that there was not much difference in an OAA no money payment person and an MAA person, but there is a difference, and this is the issue.

The difference is in the eligibility requirements, as far as this person's annual income goes. We had hoped to serve that group of people that we have termed the medically indigent, as far as those over 65 are concerned, those who had a small income, enough to provide for food, clothing and shelter, but to whom illness would be a catastrophe. This was the whole point of Kerr-Mills and MAA.

These people are a little bit better off financially than those who are eligible for old age assistance. At the present time the policies of the State Department of Public Welfare have an income limitation of about $600, if I am correct in that, and if their net income per year were below that, they were eligible for old age assistance, including a monthly check and the medical benefits. If it were above that, they were not eligible.

If we have an income level in our eligibility requirements that low, that severe, that strict in North Carolina, we will not reach the medically indigent group for whom Kerr-Mills and MAA was intended, and therefore it would not be as much of an answer to the problem and would not be as much of a bulwark in our fight against King-Anderson as we had anticipated.

We therefore were very disappointed in the action of the Board of Public Welfare. We are not alone in this disappointment. Several of the legislators who steered this legislation through the General Assembly have been talked with since the action of the Board of Public Welfare and it is the feeling of the legislators and of the Legislative Committee, Dr. Johnson's Committee, Liaison, that the Board of Public Welfare be petitioned to reconsider this decision.

We have some indication that they anticipate such a request, that an open meeting of their Board would be held to further consider this. It is anticipated at this meeting that the Medical Society would have a spokesman there to present

our point of view, that several legislators who became sold on the idea of MAA would be present, that perhaps certain county commissioners from individual counties who joined with us in our fight during the legislation be present to support our point of view.

I believe this is a very important thing to us if the MAA is really going to mean what we want it to mean in North Carolina.

Additional items of interest that have come up in relationship with the Welfare Department are these:

Commissioner Brown has had difficulties. I do not think there has been any purposeful foot-dragging in setting up this program of Medical Assistance within his Department. The legislature passed a host of new legislation affecting the Welfare Department and there has been a flurry of new directives from HEW relating to existing programs, all of which create new duties, new reports, new problems for the Department of Public Welfare. This MAA Program has been just one of many, and most of these new jobs have been added without any new people to do them.

He has had problems in simply getting around and getting the many new jobs. He has made some progress, he is setting up some manpower to administer whatever medical care program is finally evolved. He has met not only with our group but with the other groups that would be affected: the dentists, the pharmacists, and so forth.

One interesting development that might help him to solve this manpower problem is this: The legislature passed a bill that permitted the Department of Public Welfare to have a nonprofit insurance company, such as Blue Cross, to act as the intermediary agent in processing applications and making payments to individual vendors. For example, to individual drug stores and hospitals with claims that might arise under this new program of benefits.

Meetings have been held with both of the Blue Cross organizations and I think that further meetings will be held depending upon what individual eligibility requirements are finally established and what fee schedules are finally established for reimbursement.

Commissioner Brown has informed us that the only possible way to handle this would be through automation and that the data processing equipment the state has available to the Department of Public Welfare simply could not handle this type of new program, but that the automated equipment that is available to the Blue Cross plans could handle it.

So that I anticipate further discussions and I think that we could support this point of view that the Blue Cross people operate the mechanics of this program with the Department of Public Welfare overseeing this project and setting policy.

The relationship with the pharmacy group has progressed to the point that a contract has been drawn up, in conjunction with the Department of Public Welfare, a contract which would be in each instance a contract between the Department of Public Welfare and the individual participating drug store. It violates one of the laws pertaining to restraint of trade, so that there cannot be a master contract between the Department of Public Welfare and the North Carolina Pharmaceutical Association; it would have to be with the individual vendor and be a separate contract so that each drug store would have their choice to participate or not to participate.

We were asked to review this contract. Mr. Barnes and I did and we made several suggestions that we thought were in the interest of good medicine and in the interst of the physicians and I think it is a good contract, it protects both the interest of the doctor, the patients and the state.

You would be interested to know that the concept for reimbursement of the individual drug stores will be on these grounds, on the basis of a professional fee for the filling of each prescription, regardless of what the prescription is for, plus the actual wholesale cost of the medication involved in the individual prescription.

If it were expensive medication, one of the broad spectrum antibiotics, it would be the $1.75 fee plus the wholesale cost of the medication.

Of course, this is simply in a way an insurance device of spreading the cost of all of the prescriptions over a broad base so we would not have quite the wide swing between the very minimal low cost prescription and the several very expensive prescriptions.

This has been used in other places and I don't think it would cost any more to the state and it seems to be agreeable to the pharmacists, and I see no reason for it not to be agreeable to us.

One other very important thing in these discussions is this. Under the various federal regulations that pertain to these amendments to the Social Security Act there is a legal limit to the federal funds that will be made available under Old Age Assistance, APTD and ADC, to this end. You take the total amount that you are spending, say, on your Old Age Assistance group, and you take the total number of recipients, and there is a $70 per recipient per month limitation under Old Age Assistance.

There is also a $70 per month limitation under the Aid to the Permanently and Totally Disabled. Included in this $70 would be the monthly grant, to those who are getting the monthly grant, and the total cost of all other services, such as hospitalization and the new program of benefits that we're talking about.

At the present time the amount that is being spent on the average per recipient in North Carolina under Old Age Assistance is a pretty good way from the maximum federal limit or cut-off

point. We are at about the $60 level in Old Age Assistance, and even if we added $10 per recipient, we still would not come near at the present time to the $70 limitation, even with the increase in the per diem rate of hospitalization cost and with the new out-patient program.

However, the state is presently in serious difficulty with the Aid to the Permanently and Totally Disabled Program. We are now at a level of $68.50 per month per recipient under the Permanently Disabled Program. This means that when we get to the $70 point that federal matching funds will be cut off completely for anything the state spends for permanently and totally disabled above $70, and the burden of any expense above that would be completely on the state and counties.

This is going to occur, they are going to cross that $70 limit simply by the increase in per diem of hospitalization without the new program, and Commissioner Brown is very concerned about this and the only solution that he sees at the present time is to immediately set a limitation on the number of days of hospitalization for permanently and totally disabled cases.

This has never been done before in any of our welfare hospitalization programs. This is one of the things that we brag about, one of the advantages that we had as opposed to King-Anderson which had a maximum number of days of hospitalization.

He further feels that if he limits the number of days of hospitalization for permanently disabled recipients, in order not to be accused of discrimination that he would also have to limit the number of available days of hospitalization for the old age assistance group and for the dependent children group.

We reviewed with him utilization figures, length of hospitalization, and we are finding that the cost per case in hospitalization of your permanently disabled group and the average length of hospital stay is far in excess of the other two groups. This is what has caused this situation to arise.

I do think it would be detrimental to the interest of our program that we have in North Carolina for our indigent group and particularly for our elderly indigent group to have this to come to pass, to see a limitation on the number of days of hospitalization.

I don't know what we can do about it at the moment except, number one, push for our MAA plan, because that does not have any federal ceiling on the expenditures per case. It is whatever the state puts up in the way of state matching federal funds. There is no ceiling on the matching federal funds in that program.

Another thing we might do is we could make some expression to our membership and do everything that we can to limit the number of days of hospital stay, particularly in the APTD group. We have figures on the order of 18 days per hospitalization for the aid to permanently and totally disabled group.

When you multiply 18 days by the previous per diem rate of $16, and now you would multiply it by the rate of $20 reimbursement per day, this particular category of people are costing the state a lot of money, and this is us.

DR. KERNODLE: Ed, what percentage of the total no money payment patients are in the ATPD?

DR. BEDDINGFIELD: I cannot answer that question.

DR. KERNODLE: That's the largest percentage of patients. It was well over 55 per cent the last time I talked with them.

DR. BEDDINGFIELD: It's the largest percentage of patients and they stay longer.

I would like to point this out, the APTD group is the only one that is on the welfare by definition of physical disability. The old age assistance group is on there because of the chronological evolvement of age. The dependent children are on there because of social and economic circumstances. But the disabled group, by definiton they have to have something physically wrong with them or they wouldn't be in there, so you would expect more illness and more hospitalization to occur within this group.

But the financial trouble this group is in may jeopardize the other two groups. Of course, we're particularly interested in the older citizens group right now.

I believe that those are the main points, unless, Jim, you have something.

DR. BRINN: In your review with the pharmacy group in regard to drugs, there are in certain areas some dispensing physicians, what is their status?

DR. BEDDINGFIELD: I'm glad you brought that question up because it has been asked. The attitude at one time and we have tried to protect the interest of the dispensing physician in areas where a drug store is not available.

However the Pharmacy Association and the Board of Welfare recognizes that there are some areas in this state where a drug store is not available and by necessity the physician has to dispense his own drugs and it would certainly be discriminatory not to allow that physician's patients the same drug benefits that were allowed those in the area that did have a drug store.

The tentative agreement or the basis that the dispensing physicians in an area where their patients did not have immediate access to a retail drug store could be certified on the same basis and a contract made between him and the Department of Public Welfare for handling drugs on the same basis. That is the basis.

DR. HARRY L. JOHNSON: What would be interpreted as immediate area?

DR. BEDDINGFIELD: That has not been fully defined. We did not accept their original definition. The original definition was county, in any

county that did not have a retail drug store, the Board of Pharmacy then said they would okay a dispensing physician in those counties. Mr. Barnes and I protested that and said that if you have this category of welfare patient that the simple act of transportation for 15 or 20 or more miles from the docotr's office to the drug store in another town would in fact rule out that patient from getting drug store benefits, because he couldn't get that far to the drug store.

I do not know what will be evolved but our policy endorsed by this group would be to have it within the realms of practicality, so that it would be a benefit to the patient.

There is a serious question about the dispensing of drugs by nurses in doctor's offices and the Attorney General has issued a written opinion to the effect that a nurse, acting on a doctor's order, may administer a dose of a drug. There is a difference in administering a dose of a drug, which in intended for immediate consumption, and dispensing a supply of drugs for consumption over a subsequent period of time.

The Attorney General has held that a nurse would be practicing pharmacy in violation of the State Pharmacy Law.

MR. ANDERSON: The Attorney General has also ruled before that only the pharmacist in the drug store can actually dispense drugs.

DR. BEDDINGFIELD: That is true.

Unless there are other questions, the action that I would request this Council to take right now would be to have the Council go on record as requesting the State Board of Public Welfare to hold an open meeting to reconsider a program for medical aid to the aged under the Kerr-Mills Act, MAA.

I make that in the form of a motion.

DR. SAMS: I second the motion.

PRESIDENT RHODES: I think that what Ed reports, to me, could be divided into two parts, and this is the major issue. I am sure that there is a great deal of disappointment among the people who worked so diligently and so hard to get the MAA program implemented and most of us believed that this program in the minds of the assembly was an MAA program.

Is there further discussion of the motion? The motion has been made and seconded that this Council recommend that the Board of Welfare hold an open meeting for further discussion of this matter of implementation of MAA, to reconsider it.

PRESIDENT RHODES: Any further discussion?

(Call for the question.)

If not, so many as favor the motion make it known by saying "aye." (The motion carried.)

DR. BEDDINGFIELD: I just wonder if we need to make any information available to our membership about this length of hospitalization for APTD, because I think this would jeopardize our whole program, and if there is anything that we could do as individuals in informing our membership to try to cut down the length of hospitalizations for these APTD people it would be good.

DR. SAMS: I move his report be adopted, in full.

PRESIDENT RHODES: Is there a second to that motion?

DR. HARRY L. JOHNSON: Aye.

PRESIDENT RHODES: Any discussion?

(No response.)

If there is no discussion, as many as favor the adoption of Dr. Beddingfield's report make it known by saying "aye."

It is so ordered.

I would like to recognize Mr. Jim Reed who honors us with his presence today. Mr. Reed is the Director of the Division of Communications of the AMA. He had a very important part in our program yesterday at the Officers Conference and I will ask Jim if he will stand and if he has any comment he would like to make.

We are glad to have you, Jim.

MR. JIM REED (Director, AMA Communications Division): Thank you. I really think I have said everything I should say yesterday. Again, I want to say I appreciate having the opportunity of being here and I was impressed with your meeting over the weekend and I was happy to have a small part in it.

Thank you very much.

PRESIDENT RHODES: At this time, we will pass out the booklets. It is a very fine compilation of instructions to new members of the Medical Society.

I also recognize Dr. Joe Combs. I will ask him if he has anything he would like to bring to the Council.

DR. JOSEPH COMBS (Secretary, North Carolina Board of Medical Examiners): I have nothing to bring up.

PRESIDENT RHODES: Now, the Report of the Committee on Occupational Health, and I will ask Dr. John Hall if he will present this report and introduce the physicians that are accompanying him. Dr. Hall.

DR. JOHN M. HALL (Committee on Occupational Health): Mr. President. At the last meeting of the Committee on Occupational Health I was not present and the conception of this idea I cannot claim. Some of the men who were around about that time are here.

There was a proposal made at our last meeting that at the next Medical Society Meeting in Greensboro that we work towards and develop a plan to at least offer a limited examination to physicians whom we might encourage or in some way get to take the examination, and at that time, Dr. W. L. Wilson, who is Chief of the Section on Occupational Health, was asked to look into this matter, and

he has done so since that time, and I would like to turn this over to him now.

DR. W. L. WILSON: Dr. Rhodes, we are in a position where we can make some detailed report, more in the form of a progress report than one of final consummation.

I will introduce Dr. Arthur Davis from Raleigh, Rex Hospital Laboratory Department.

To offer a reasonable and effective screening examination of our own colleagues placed quite a responsibility upon us. We weren't inclined to come up with any proposed examination that would not tell the physicians who volunteered for the examination a considerable amount about himself.

Secondly, it would have to be a fast process.

Thirdly, so many possibly have participated in this sort of thing in the last three years at AMA Annual Meetings that we felt it would have to be reasonably close to as good as the AMA examination.

This created some financial problems and some of the problems were practically impossible to solve by this May and particularly in the realm of the laboratory or diagnostic screening. It would be one thing to offer to our colleagues an examination merely to report back that his cholesterol is a certain amount, because he will get that anyway, but if we could report a fairly comprehensive finding we had to have more time in which to assemble and provide the equipment to stamp the procedure for two days and to, above all, leave confidence in the minds of our physician members, or leave confidence that they have had a good examination.

That is where we are today, a progress report. We would hope, after this much investigation and study and with the leads we have and with reasonable confidence that we are going to have this type of examination, we thought we would like to present this report at this point. If you had details such as demonstration of capability of this type of examination, this was the other aspect that we weren't satisfied that we would have this year adequately. If a physican is going to take this examination, we would hope he would take the examination, but, secondly, see what magnificent potential there is to the physician in his diagnostic work or in his evaluation of progress in the patient.

Dr. Davis, just coming down here this morning, encouraged me because we now know that laboratory procedures are, he says to me, considerably more automated by this September than ever before.

Art, would you expand on that just a little bit here so that they will know what I am not talking about and you will be?

PRESIDENT RHODES: We would like to hear it.

DR. ARTHUR DAVIS: I have been talking to the Teckinart Company and they have succeeded in a simultaneous 12-channel analyzer. It will analyze 12 different situations in the blood, electrolytes, cholesterol, Buns, but it will do this simultaneously and it will print it on a piece of paper that you tear off the recorder and paste on the patient's chart.

Instead of charging them $70 for that, you can probably do it for $6 or $7.

They have also automated hemoglobins, the white count and the red count, they have automated cross-matching, the identification of rare antibodies and blood typing.

This is, of course, what we are looking for in laboratory medicine to bring laboratory medicine up to where industry is on their internal quality control but we are still at the stage in many respects where we have a test tube in one hand and a small bottle of chemical in the other, and this is simply not an efficient method of bringing results to the physician.

I also called Dr. Tom Perry in Washington, D. C., who headed the program of AMA and he said that if I would come up there he would let me use their bookkeeping system, because they spent a lot of time and a lot of trial and error getting this thing set up so that once they did get the information they could get it back to the physician and have him do something about it.

In other words, the followup is, I think, just as important as the examination.

DR. WILSON: Thank you, Dr. Davis.

This does emphasize, so many of us cannot keep up with so many different things going on in the progress of our practices, and it emphasizes one thing that this small committee of three had hoped to bring out; that we would want this to have two benefits to the physician.

One would be the actual examination and the report back to him relatively promptly. The other would be a real demonstration of recent and very current progress and capabilities in our consulting realms in which we may not ourselves be fully familiar.

Therefore, unless there is some other question, Dr. Rhodes, our proposal would be that the Committee on Occupational Health be permitted to go ahead and develop this for May 1965, but on a considerably more calmly and effectively production of results basis.

PRESIDENT RHODES: Dr. Hall, as Chairman of the Committee, would you go along with this proposal?

DR. HALL: Yes, sir, that is our recommendation.

PRESIDENT RHODES: I think this is a fascinating idea and I believe it would stimulate attendance at our annual meeting. It would be of value in more ways than one, as has been pointed out, to our membership. I think the Council has already approved the idea in accepting the report of this committee at its last meeting.

Do I hear a motion that we accept this as information and authorize the committee to proceed?

DR. HARRY L. JOHNSON: I so move.

DR. GARRISON: Second.

PRESIDENT RHODES: Any discussion?

(No response.)

As many as favor the motion make it known by saying "aye." (The motion carried.)

Suppose we move to the Report of the Committee on Insurance. Dr. Hooper was not able to remain for this Council Meeting and very briefly I am going to bring you a report of the action of that committee. I will ask Mr. Anderson to stand ready to correct me and to elaborate.

There is one major item involved and that is the question of the premium rates for professional liability insurance.

In 1962 the Rating Buerau, which, as I understand it, is responsible for all bureau companies, or is supervisory of all companies selling professional liability insurance recognized by the insurance commissioner in North Carolina with the exception of St. Paul, established instead of a two-way category, that is, physicians and surgeons, a four-way category.

Briefly these categories are as follows:

First, general practitioners and specialists who do not perform obstetrical procedures or surgery.

Two, general practitioners and specialists who perform minor surgery including obstetrical procedures, not including major surgery.

Three, general practitioners who perform major surgery or assist in major surgery on other than their own patients, cardiologists, including catheterization but not including cardiac surgery, ephthalmologists and proctorologists.

Four, the specialists doing major surgery.

The Rating Bureau set up rates for these four categories. The St. Paul presented to the committee its experience since 1956 over a period of about seven years showing a rather marked diffrential in the incurred risk or incurred claims in the two categories of physician and surgeon. They say that a 51 per cent incurred risk loss is the maximum, otherwise they cannot operate.

Under the physician classification over this period of years since we have been insured, or at least a good many members have been insured by the St. Paul there has been a ratio of .34; whereas among the surgical classification the ratio has been .69, which, you see, has better than doubled the incidence of loss among the surgical classifications which represents a total ratio, or an average ratio of total of .499 which is very close to the 51 per cent.

What they propose to do is to establish the four categories according to the Rating Bureau, and establish a premium rate based on this past experience. I will simply give you the comparison between their proposed rate in the four categories and the Bureau's Rate.

They propose a $23 rate for the physician. This is on basic coverage, that's 5 and 15 limits, I believe.

This is based on the basic coverage. $23 for the physician as compared to $24 for the Rating Bureau, and I might point out that the $24 the Rating Bureau has established would be higher, considerably higher than their present rate of $27, that is the St. Paul's rate, so that they would be in real competition with the Rating Bureau companies if this change was not made. So they propose to reduce their rate to $23 which would be one dollar lower than that of the Bureau.

In the second classification they would propose a rate of $29 compared to $30 under the Rating Bureau schedule.

For the third class, $55 as compared to $58 for the Rating Bureau.

In the fourth class, that is major surgery, they propose a rate of $74 as compared to $86.

Of course, it might be pointed out here that this probably will create some criticism on the part of some people, particularly those who happen to be surgeons, but it is to be pointed out that if they cancel out this type of insurance or the St. Paul insurance, they wouldn't have any where to go unless they went to a company under the Rating Bureau which would be considerably higher.

In other words, the rates for the surgeon under the Rating Bureau is $86 as compared to $74 which is St. Paul's quote.

We have 814 who would fall in the class one, we would have 243 in class two and 240—these are present subscribers—in class three and 511 in class D or class four. So that nearly half of our physicians would receive a reduction in premium rates. The others would have a graduated increase, depending on their classification.

John, do you have any comment on this that you would like to make now?

MR. ANDERSON: That classification has been in effect not price-wise but for about eight months since the Bureau made the classifications with the approval of the Commissioner. The St. Paul has been classifying all of the subscribers in that fashion but charging the old rates, charging $27 and $55 base.

PRESIDENT RHODES: Yes, the old rates were $27 and $55.

(Discussion off the record.)

I might point out. I mentioned that the St. Paul permissible loss ratio was 51 per cent whereas the Rating Bureau establishes a 47 per cent permissible loss ratio.

DR. PASCHAL: We are in the position that we do not have any other place to turn for any more favorable rating.

PRESIDENT RHODES: I believe that is correct.

DR. KERNODLE: John, what did the committee recommend in regard to this?

PRESIDENT RHODES: That we adopt it, the four points be approved.

EXECUTIVE SECRETARY BARNES: That we adopt the four classes and that we adopt the St. Paul proposed rates for the respective classes. That was the committee's recommendation.

DR. PASCHAL: I would move that it be approved.

DR. LYNWOOD E. WILLIAMS: I'd second.

PRESIDENT RHODES: Any further discussion?

DR. RAIFORD: The group four surgeons are the ones who are going to yell.

So this is, insofar as possible, an accurate distribution of premium according to cost. It cannot be absolutely accurate based on experience, but this is as near as they can come to it.

EXECUTIVE SECRETARY BARNES: It might be said also that these proposed rates are projected for 1964 and if their experience comes under that then they will re-evaluate the program at the end of 1964 and come back to us with a recommendation of rate adjustment and we presume vice versa.

MR. ANDERSON: You understand that the Bureau Rates and statistics actually take into account the reported losses of St. Paul. St. Paul is a reporting member of the Bureau, so the Bureau is composed of all companies which write this type of insurance in North Carolina and they report their losses and statistics to that Bureau in New York, actually. St. Paul is one of the reporting companies.

PRESIDENT RHODES: But they operate outside the Bureau actually by virtue of their authorization by the Commissioner.

MR. ANDERSON: That's right.

PRESIDENT RHODES: Any further discussion?

DR. SAMS: The question.

PRESIDENT RHODES: If not, so many as favor this motion that we approve the recommendation of the committee that this change in schedule of liability insurance be accepted, make it known by saying "aye."

It is so ordered.

We will now have Mr. Beeston report on two items: First the Hi Value Blue Shield Program, and secondly on Senior Citizens Program.

MR. K. G. BEESTON (Hi Value Blue Shield Program): If I might first make just one comment on Dr. Beddingfield's report, we did interview Mr. Brown along with the pharmaceutical people on both plans and he was definitely interested in getting some help, particularly statistical help, I think, with a computer which we have but that was before the decision was made not to have a separate program. So whether that will affect it or not, I don't know.

The Hi Option Blue Shield Program approved last May was put into effect November 1st. Our first enrollment under it was with the federal civil service workers, a group of about 50,000 people. All the doctors have been mailed a resume of the schedule. We have had no adverse reaction that I am aware.

In February we will run newspaper advertisements in 25 of the largest papers. We will have some little brochures available for doctors to put in their office.

All I can say is that the program is launched and well under way and we just have an educational and persuasive task now to upgrade the level of coverage as best we can. We have large segments of particularly textiles that have not seen fit to put the amount of money that would be necessary into this hi level program, but in the electronics and government agencies and many such groups they do want the very best coverage they can buy.

Many of them bought Blue Shield and they want the best program that Blue Shield has. So I think in this new program you have helped us a great deal and it is something that we are proud of.

The Senior Citizens Program is just an individual matter. There was a person who enrolled under the Senior Citizens Campaign that was put on in November of 1962. This person I believe was born in 1877 so she was quite an elderly lady. We paid out a good many hundreds of dollars in benefits in connection with a broken hip.

She was transferred to the nursing home and the provision there is that we will pay 60 per cent of charges or $8, whichever is less, and there was a misunderstanding with a Charlotte physician because we paid $6, which was 60 per cent of the $10 charge, and he felt we should have paid $8.

I feel confident, though, that we have paid it correctly in accordance with the contract.

EXECUTIVE SECRETARY BARNES: His point leveled at the county medical society was this, that there was representation of one thing when the program was sold and then the contract provides another thing when you get the claim, you see, and we wanted to know if there is any educational effort among these senior citizens that medical societies or the practicing physicians can carry on that might help you avoid that misunderstanding on the part of the senior citizen subscribers?

MR. BEESTON: Of course, the doctors did help us a great deal and we had literature available and much of it was in doctors' offices. This was that one month open enrollment period with no age or health limits.

I checked back on that literature and it is stated correctly, so I think it was just maybe wishful thinging or some such.

DR. KERNODLE: Mr. Chairman, I would like to quote the figures that were quoted in that letter. The benefits are really astronomical.

There were about $1250 worth of charges for this elderly lady and nearly $1,000 was paid by Blue Shield, Blue Cross for benefits. Now, the

differential was not in this nursing home problem but she had a different (luxury) category of room in the hospital and that is spelled out, that it would pay for a ward or semi-private bed. So she has to pay the differential.

In reality it paid all but about $70 or what they thought it should pay. It was only about $70 differential.

PRESIDENT RHODES: Is there any further discussion?

Thank you, Ken.

I believe we can just accept this for information.

Let's go back and let Jim make a comment here with reference to the Budgetary Requests of the Committee on Maternal Health.

EXECUTIVE SECRETARY BARNES: I would simply comment to the Council that when the Council approves a budget in September of a year and allocates a certain amount of money to a given activity expressed in the budget, of course, that money becomes available when your total revenue for the succeeding year is in, and there is a disposition on the part of even our functional committees, much less some of our extracurricular contributions, to understand that when January 1st comes they can request their total allocation for the year. Of course, on January the 1st we don't have the first dollar of the new year's revenue, and so when a committee writes us and says, I want my budget for 1964 on December the 31st, as I have here in my hand, we can't do that.

What we are doing, we are breaking the annual budget into either a quarterly or a semi-annual allocation and paying that as early as we can in January, and then as our revenue accrues during the year we go back and make those lump sum as funds which are authorized and appropriated are available. So that a given committee that has a $4,000 allocation, we are not able to pay that on January the 1st, but we may pay a fourth of it in March and maybe half of it in July and the rest of it in September, as early as revenues are accrued to take care of it.

I wanted to have the Council know that because you might get some complaints from these folks that we're a little slow on acceding to their appropriated requests.

PRESIDENT RHODES: Without objection, I would rule that is an administrative problem and leave that to Jim's judgment and suggest that a little blurb be put in our Public Relations Bulletin explaining this matter.

Would you tell us about the meeting in Asheville in 1966?

EXECUTIVE SECRETARY BARNES: As you know, at the last meeting of the Council there was some doubt as to whether or not our contract for 1966 was possible in Asheville and the action of the committee was to authorize me to confirm that with the facilities in Asheville and I want to report that the Chamber of Commerce, the City of Asheville and all of the principal hotels in Asheville now have firmed up the availability of their facilities for 1966, so that we will in all literature announce definitely that the 1966 Annual Sessions will be held in Asheville and we are backed up by firm reservations of facilities.

PRESIDENT RHODES: I believe we can accept that as information, unless there is some comment.

PRESIDENT RHODES: I recognize Dr. Amos N. Johnson.

DR. AMOS JOHNSON: Here is some information from the American Medical Association that theoretically has gone to our office in Raleigh to Mr. Barnes from Dr. Blasingame and the subject matter is the AMA House of Delegates action taken December 4, 1963, and referred to state and county medical associations for implementation.

This deals with Resolution 14 that was brought before the House of Delegates in 1950 and was acted upon that portion of the report of the Board of Trustees which deals with restrictive membership provisions for negro physicians that was acted upon and adopted by the House of Delegates of the American Medical Association in Portland this year.

I will read you only the Resolved portion, first, of the action that was taken in 1950, which says:

RESOLVED: That the constituent and component societies having restrictive membership provisions based upon race study this question in the light of prevailing conditions with a view to taking such steps as they may elect to eliminate such restrictive provisions.

That was adopted in 1950, and all it does is ask you to review your position.

This year in the report of the Board of Trustees, supplementary report it was suggested that this be considered again, this matter of membership.

I will read you the resolve brought out by the hearing of the Reference Committee which heard this report and which was adopted.

RESOLVED: That members of the medical staff of every hospital where the admission of physicians to hospital staff privileges is subject to restrictive policies and practices based on race be urged to study this question in the light of prevailing conditions with a view to taking such steps as they may elect to the end that all men and women professionally and ethically qualified shall be eligible for admission to hospital staff privileges on an equal basis regardless of race.

Adopted. This is a permissive resolution and asks you to take another look.

PRESIDENT RHODES: Thank you, Amos.

(Discussion off the record.)

DR. PASCHAL: I would move, without going through a preamble, that this Council approve and ask the House of Delegates to further approve the change in our Constitution and By-laws which would make it possible for any person who meets

the specified requirements for membership to be granted such membership in this Society.

DR. GARRISON: Second the motion.

PRESIDENT RHODES: Seconded by Dr. Garrison.

DR. HARRY JOHNSON: I move this motion be postponed until this afternoon?

DR. WILLIAMS: I'll second the motion.

PRESIDENT RHODES: Dr. Williams has seconded the motion to postpone.

We will take up the substitute motion first. Is there any discussion of the substitute motion?

DR. RAIFORD: I would just propose the suggestion. We can handle it any way everybody wants to. But it would be my suggestion that we delay any definitive action of the Executive Council until the May Meeting.

DR. STYRON: Mr. Chairman, this is a problem that we have discussed at great length, everybody knows how he feels about it already. We spent eight hours or so down here at a previous meeting about it. I certainly agree with Ted that this is something on which a decision can be made later and on which we can act shortly after such a decision is made, and I do not believe that it is appropriate at this Executive Council Meeting to go into a long detailed discussion of something that we have talked about at great length previously, and a situation which has not materially changed since that time.

PRESIDENT RHODES: Any further discussion of the substitute motion?

(No response.)

If not, so many as favor the substitute motion make it known by saying "aye."

(A chorus of "ayes.")

Opposed "no."

DR. REECE: No.

PRESIDENT RHODES: It is so ordered.

Consider request of Pamlico County physicians for evolving a hyphenated society of Craven-Pamlico Counties. Dr. Lynwood Williams, will you discuss that?

DR. LYNWOOD WILLIAMS: Mr. President, down in my District, the Second District, we have a situation in Pamlico County where there has been no active physician. Dr. McCotter has been there and he has been serving as a one-man spokesman. He's a life member and quite elderly as you know and not in fulltime active practice.

Recently two younger men have moved into the Pamlico County area at Bayboro, Drs. Atkinson and Hudson, and they have expressed their desire both to the state office and to me to hyphenate with the Craven County Society. I have in my hand copies of letters that went to the state office so stating. The two physicians from Pamlico County have signed it and the Secretary of the Craven County Medical Society quotes a motion passed in his Society expressing their desire to hyphenate.

I would approve this combination. They lie geographically adjacent and I think it would be a fine thing.

I would like to move that we approve the hyphenation of the Pamlico-Craven Medical Society.

DR. SAMS: Mr. President, he has thoroughly complied with our regulations of the Constitution in the formation of this Society and he is the Councilor there and is recommending it, and I will be very happy to second his motion.

PRESIDENT RHODES: The motion has been made and seconded that this request be approved.

Any discussion?

If not, so many as favor the motion make it known by saying "aye." (Motion carried.)

Consider Candidate for Outstanding MD of the Year on Physically Handicapped.

EXECUTIVE SECRETARY BARNES: As you know, we come to the Council each year with this Governor's Committee on the Physically Handicapped and the President's Commission on the Handicapped, both of which are federal and state commissions, with a recommendation of a nomination for a candidate for this distinction, and we have introduced this to some people who thought that Dr. Beverly Raney of Chapel Hill should be nominated for this position in the light of his long efforts for the physically handicapped beginning with his practice in Durham in 1934, his association with Dr. Shands in the writing of at least two books in collaboration with Dr. Shands on orthopedic surgery and the treatment of the physically handicapped and the section on orthopedic surgery and traumatology which is largely concerned with this area of practice, and the state has recommended that Dr. Raney be considered as the candidate to be nominated.

That is about the substance of what is involved.

DR. KERNODLE: Mr. Chairman, I move that the Coucil recommend the nomination of Beverly Raney for the award.

DR. SAMS: Second the motion.

PRESIDENT RHODES: Any discussion of the motion?

If not, so many as favor the motion make it known by saying "aye."

It is so ordered, then.

Dr. Combs.

DR. JOSEPH J. COMBS: Mr. President, you asked if there was any message from the Board of Medical Examiners. The attorney has just called to my attention that maybe the Council would like to be informed about one case we had last June. We tried one Dr. Kincheloe of Selma and revoked his license and there was an appeal made and I believe it is the first one in my recollection where there has been an appeal to the Superior Court.

The Board's revocation would stand until he appeals to the Superior Court Judge to set aside the Board's judgment.

This case was drawn out because of the fact that his attorney was ill but just recently in

Raleigh it was heard and the Board was sustained in their judgment and then the revocation went into effect.

One other point is that there will be a meeting in Chicago on February 10th and the AMA has asked the Board of Medical Examiners to send their legal counsels for a one-day conference and the Board has voted to send Mr. Anderson who happens to be both attorneys but this time it will be at the expense of the Board of Medical Examiners.

PRESIDENT RHODES: Thank you very much. I will now declare an Executive Session.

(The Executive Council then convened in Executive Session.)

SUNDAY AFTERNOON SESSION

January 26, 1964

The Meeting reconvened at two-fiftten o'clock p.m., President Rhodes presiding.

PRESIDENT RHODES: Gentlemen, let's come to order. By an earlier action you will recall that discussion of the problem related to integration of scientific members was deferred until this first item after lunch.

(The motion was restated by Dr. Paschal.)

PRESIDENT RHODES: That motion has been duly recorded and seconded.

Now we are open for discussion.

DR. BEDDINGFIELD: Dr. Rhodes, I would like to make this observation. I thought that Dr. Raiford had a good point this morning in that if we take this action now and subsequent events between now and May develop which might make us regret this action, I think that is a valid point of view.

If it is our decision that this has got to come to an ultimate decision on the Floor of the House of Delegates, then I think we ought to go ahead and enact Dr. Paschal's motion now so that the delegates who are going to attend will know what is coming out.

DR. HARRY JOHNSON: Mr. Chairman, may I just say that my motion to postpone was based on the thought that we might be able to come to a conclusion on George's motion with less discussion.

I feel just as Ed does that it would be far better for us to take action here today and pass it on to the Delegates who are coming to Greensboro in May and let the county societies know that the proposition will be presented to the House of Delegates.

DR. BRINN: Mr. President, I agree with all that has been said in regard to having this referred to the House of Delegates with one day's preparation, but I do feel as if the decision on that should be deferred by the Council until the May Meeting of the Executive Council.

I think that if we would defer here today until we have had an opportunity for them to scan in their Executive Council Meeting how they would feel about this sort of thing.

For that reason, I feel that we should defer action at the present time, get their opinion as to how they feel about this sort of thing and come back armed with that and decide what we are going to do, and let's get it over with.

PRESIDENT RHODES: Dr. Patterson.

DR. PATTERSON: The Auxiliary certainly is not 100 per cent of the wives of the Society.

However, I personally feel that that ladies can handle this themselves. I think that they are mature, grown ladies that we married and I think that they can handle any situations that come before them.

PRESIDENT RHODES: I think the point that Dr. Brinn makes that we certainly are indebted to and dependent upon the Auxiliary for many of the things that we do, and I would agree that we would like their point of view.

On the other hand, I think that if this were approved there are areas that would have to be studied and certain problems resolved and there would be some time elapse certainly before this could be implemented, even if we approved it, because there has to be a change in the Constitution.

It would be at least a year's delay, and during that time I think whatever we do here that we would have an opportunity to get their point of view.

Certainly any action we take will be only tentative because the House of Delegates will have to decide finally.

Is there further discussion?

DR. REECE: The only comment I would have to make is that I am in favor of George's motion.

DR. STYRON: Would it be possible to let it be known in the various county societies that this is to be brought to a vote?

DR. PASCHAL: My motion intended to have the House of Delegates given the opportunity to reject or approve this action.

I believe that just our simple approval of this does not commit the State Medical Society and gives them the opportunity to override us, if they so desire.

DR. AMOS JOHNSON: I was actually on that committee and that was my understaning of what had happened. Now, having been rather closely associated with this problem and proposition for some while I want to express an opinion or two. I realize that I am asking for your indulgence, because I am not a member of this Council, and I do not basically disagree with what George is saying here.

The way I feel morally about my fellow man and the way my fellow man feels about me involves a little different perspective in this situation. Those of you who have not sat for four or five years on this ad hoc committee as I have do not realize the attitudes that are on the other side, and every little bit of compromise of that which is right involves give and take from both sides. There is reason to believe that in recent years that isn't the case.

I do just not see the urgency of us taking an action one way or the other. If we vote against it, we can't win; if we vote for it, we can't win. If I were a member of this Council, which I was for a number of years and am not now, I would at this moment make a motion to table this action.

PRESIDENT RHODES: Thank you, Dr. Johnson. We always want to entertain your thoughts about any matter that comes before this Council, and we thank you for bringing your thoughts to us.

(Discussion off the record.)

I am going to recognize Dr. Hill who was Secretary of the Medical Society at the time the original action was taken, if he has any remark he would like to make in this regard.

DR. M. D. HILL: I would be inclined to leave it and let it just wait until the Executive Council meeting just before the State Medical Society Meeting and decide what you wish. That would give us all more time to think and then, if necessary, bring it on the Floor of the House of Delegates.

That is the only vote that I have ever cast in my life in medical organizations and I have always been sorry I did. I voted in favor of the scientific membership. For years and years I was opposed to it but I am still sorry I voted for it.

PRESIDENT RHODES: I think I announced at the beginning of this discussion before lunch that there had been no further communication.

There is, however, considerable restlessness among some of our membership and that is one reason I brought it up here, because there has been some discussion among our membership and I think Dr. Paschal indicated that when he made his motion.

DR. SAMS: Mr. President, I am going to make a motion that we table this until our May Meeting.

DR. RAIFORD: I'll second the motion.

PRESIDENT RHODES: The motion has been made and seconded. No discussion is in order, I believe, with that motion.

As many as favor the motion to table make it known.

Let's have the hands.

The motion to table is carried. It is so ordered.

I believe our Secretary has a letter from the Wake County Medical Society Executive Committee. Would you mind reading that, Dr. Styron.

DR. STYRON: Ernest Page called me and made a statement via telephone - 12:25 p.m., January 26, 1964:

The Executive Committee of the Wake County Medical Society met on 20th January 1964. The Executive Council went on record as favoring and endorsing the nomination and election of Dr. M. D. Hill as a delegate to the American Medical Association. This action is taken in view of Dr. Hill's long, faithful and effective service to the Medical Society and hopefully urges the Executive Council and Nominating Committee to endorse Dr. Hill for this important office.

PRESIDENT RHODES: Thank you, Dr. Styron. I think it is proper perhaps that we should refer this to the Nominating Committee.

Do I hear any discussion?

DR. BRINN: I so move.

PRESIDENT RHODES: The motion is then that we refer it to the Nominating Committee.

Is there a second?

DR. PASCHAL: I second the motion.

Is there any discussion of this motion?

(No response.)

If not, so many as favor the motion make it known by saying "aye."

(A chorus of "ayes.")

Opposed "no."

(No response.)

It will be referred to the Nominating Committee.

PRESIDENT RHODES: Let's move on now to a letter from Dr. Burch, Bat Cave.

I am going to ask Jim if he will read this letter.

EXECUTIVE SECRETARY BARNES: This is a letter from Dr. Burch directed to President Rhodes dated December 17, 1963.

Dear Dr. Rhodes: I have today talked with Dr. Jack Horner of Spruce Pines. We had been hopeful that this affair could be terminated out of court. This appears not to be possible. The hospital has asked for two postponements but have made no effort to change their position. As it stands now the hearing on the injunction will be held on Thursday of this week. Should the injunction not be allowed to stand, that is, if Dr. Horner is denied privileges, it is very likely that there will be an action (suits) brought by citizens of Spruce Pine who are denied free choice of a physician.

It is my understanding from persons other than Dr. Horner that Dr. Johnson got into this predicament largely from lack of knowledge of the principles of ethics and now regrets it very much. This does not apply to Dr. Phillips, however.

This is only one of this kind of episode enacted in this part of the state recently. Ought we not to consider an active program of education of the younger and a refresher for the older physicians on the subject of ethics perhaps through the P R Bulletin.

In retrospect I cannot see how any of our presently constituted committees could have handled this problem or any of the others I know about. We lack punitive power. I don't imply that we should have this power in the Society because most of us feel that problems can be settled between gentlemen. Unfortunately there are times when deceit and violation of the ethics is present and we can do nothing but sit and take it.

A byproduct of this problem is physician ownership and operation of hospitals. This has been proposed as a solution in at least two of the three episodes here. In one of them it is quite practical

from the standpoint of the community and the professional men. In the case of Spruce Pine I cannot think it sound at this time. It could come to pass there though since the Board of that hospital is self-elected and does not represent any but themselves.

The program for Pinehurst looks like a good one. I certainly intend to be there if possible.

Sincerely, and the signature does not show but it is on the stationery of Dr. William H. Burch of Bat Cave, North Carolina.

PRESIDENT RHODES: Just to bring you up to date, I think I reported to the Council members by mail that I had gone to Spruce Pine in October in association with Dr. Sams as Councilor and we had spent some time in conference with Dr. Horner, with Dr. Phillips, the Chairman of the Staff, with Mr. Wilkins, the Administrator, and then finally with all of these people in conjunction with a meeting of the Board of Trustees.

I am going to ask Dr. Sams now if he will bring us up to date.

DR. SAMS: Mr. President, this thing happened in my District and I did not know anything about it at all until I went to Mid Pines in September and it had been going for a year. This situation has been brewing for 10 years in that community up there. Dr. Reece and those of us who are pretty close to it know it has been just a slowly brewing thing, but basically and at the bottom of it it is simply a wide-open clash between two personalities.

At the September Meeting and in Mid Pines I told Dr. Rhodes that at that time when we met on Sunday, and the following Saturday they were to have this hearing under this injunction that Jack Horner got out because the Board of Directors fired him and took the staff members away from his and prevented him from going to the hospital, so he had to get out an injunction to have a place to work, and I told Dr. Rhodes then, We've got to have some time to work on this thing.

I know Frank Huskins, the Judge, personally, and so I'll go home and hunt him up and beg him to postpone this hearing.

I went home and when I got there Judge Huskins was holding court there. So I didn't do a thing but go over and talk to him, and he told me then, I'll do anything I can to make peace up there.

I said, All I want you to do is to give me some time. I said, I'd like to have 30 days time to work on this thing; so on the 9th of January here is the letter I wrote to all concerned in the Spruce Pine Hospital, Mr. Ivan Vance, Chairman of the Board of Directors, Dr. Jack Hornor and Dr. D. L. Phillips:

Since the meeting that Dr. John Rhodes and I attended with your Board of Directors, I have had no report of any kind from any of you. I have understood that the legal injunction still is invoked. I am writing you now as a last appeal for you folks to get together in this matter, confess your wrongs in this misunderstanding and withdraw the litigation with the agreement that you gave Dr. Rhodes and me in the meeting.

We have a regular winter meeting of the Council of the State Medical Society at Pinehurst on January 26th and I would like so much to have you folks get together and reinstate Dr. Horner after he has pledged himself to refrain from any attempt to operate the hospital in any way. I think this is essential for the general community hospital and for each of you personally and for the accreditation of your hospital. I personally think this is almost mandatory on all your parts. Since this is bound to come up at our Council meeting, will you please write me what you have done and what the prospect for the future among you is.

I didn't get anything from that.

So I called Bill Angle, his lawyer, in Burnsville, and Bill told me that the Board of Directors had submitted a code of things for Jack Horner to do as surgeon of the hospital, that he must do before they would reinstate him. Bill Angle said, If they put that in, saying that any surgeon of the hospital would do it all right, but to single out a man and say the Board is sore at him because he doesn't do these things, I can't go along with that, and that's the way it stands right now.

The injunction is to be heard the 15th day of February.

I assure you that we are still in the middle of the thing and maybe we have impressed upon them that we are not interested further than as a community project to save the health of the community.

PRESIDENT RHODES: Thank you, Dr. Sams.

I bring this to the Council chiefly for its information of our progress. Personally I have a feeling that we have done about all we can do in this matter.

Is there any further comment?

(No response.)

Do I hear a motion that we accept this as information?

DR. PASCHAL: I so move.

(The motion was seconded.)

PRESIDENT RHODES: The motion has been made and seconded, any discussion?

If not, as many as favor the motion let it be known by saying "aye." (The motion carried.)

Now, Dr. Beddingfield, we are ready for your report on Legislation.

DR. BEDDINGFIELD: I think I can make it rather brief, Dr. Rhodes.

I would like to add one thing as a continuation of this morning, talking about the cost of hospitalization for various welfare categories and the length of stay.

There is a higher percentage of the potential beneficiaries using APTD than there is in the other two categories and that is why this is the

one which is mainly in fiscal trouble. If there is anything we can do to bring this figure down and therefore remove the immediate threat toward the whole welfare hospitalization program, that would be indicated.

In regard to State Legislation, I do not believe that there is anything that will require Council action or Council information.

On National Legislation, very briefly I would state this. As all of you know, many of you heard the remarks of the Officers Conference yesterday, the hearings of the House Ways and Means Committee were concluded in Washington day before yesterday in regard to the King-Anderson Bill. The Bill is still in the Ways and Means Committee and I would say there is no immediate prospect of that committee taking any action. There is even some possibility that additional hearings might be held and I think this would depend upon election year presage.

I believe that for the moment medicine is in very good shape in the House Ways and Means Committee. I do not say that we ought to be complacent. Indeed, I think that with the publicity attendant upon the recent House Ways and Means Committee, the Congress has been flooded by organizations and individuals supporting the King-Anderson Bill, and I think that this definitely does need to be countered by a similar flood of opposition people supporting our point of view.

With this in mind, we are urging our operation, Hometown, which is our local level grass roots approach, to get into high gear with a letter-writing campaign simply to let our Congressmen know that we appreciate their past attitude and we hope it will continue.

A delegation from this Society is going up to Washington week after next to the United States Chamber of Commerce Public Affairs Conference and we will have an opportunity to meet with the North Carolina Congressional delegation.

I do not believe that we can assume that there will be any softening of the Administration attitude regarding this support for health insurance. I think that we have to assume that the same degree of administration attitude will prevail as prevailed under the previous president.

That is the status of King-Anderson.

There are one or two other items in National Legislation.

The Hill-Burton Bill expires in this Congress and there is some thought that because of the controversy which began here in North Carolina and to which Dr. Amos Johnson refers in Greensboro, there is some consideration that the Hill-Burton renewal might be in trouble.

This is primarily really a hospital-building program and I think they hope to settle the social issues through other vehicles.

Legislation has been introduced to take out the separate but equal phraseology of the Hill-Burton Act. We may be asked to take some action or some stand.

I think there is a good possibility that some sort of legislation regarding tobacco and cigarettes will result. In fact, Senator Maurine Neuberger has already introduced two bills pertaining to the tobacco and health program. They will undoubtedly languish in committee for a while, but we may have to make some representation on whatever bills come up.

One other matter, and if anybody has any comment I would like to know about that, another attempt is being made under the Aid to Education Act, Loans to Medical Students, which was passed last year. When this was passed, there was an amendment offered at the last moment providing for the forgiving of loans to students who went into rural areas, and this last-moment amendment was about to place the entire bill in jeopardy last year. So the sponsor of that bill withdrew it so as not to jeopardize the bill, the Aid to Education Bill, but has re-introduced it as a separate bill, and we have heard from one of our Congressmen already wanting to know how we are going to feel about it.

How do we feel about it?

PRESIDENT RHODES: The AMA did take a position, didn't they, Dr. Johnson?

DR. AMOS JOHNSON: Yes, sir, the AMA policy that was specifically expressed against the bill that has been withdrawn was against the loans in the first place and there is reason to believe that it is against any forgiveness.

There is reason to believe that the students themselves who would be the biggest beneficiaries of such action would be opposed to the forgiveness of loans, and I think I can say that without being contradicted.

DR. BEDDINGFIELD: I take it that this will be our policy. That is what I thought personally.

PRESIDENT RHODES: Without objection then we will take the position that Dr. Beddingfield and Dr. Johnson have delineated here.

Is there any objection?

(No objection registered.)

DR. BEDDINGFIELD: This is in the form of an announcement. In the Fourth District Medical Society on the evening of April 14th there is a meeting in Goldsboro and all three gubernatorial candidates for the Democrats have been invited and two have accepted. Judge Preyer has tentatively accepted, but it is not firm. So there are two out of the three and probably all three will appear at this meeting and we welcome people from outside the Fourth District who would like to attend at the Hotel Goldsboro.

PRESIDENT RHODES: Thank you.

Do I hear a motion that we accept the report of the Legislative Committee?

DR. PATTERSON: I so move.

DR. GARRISON: Second.

PRESIDENT RHODES: It has been moved and seconded. Any discussion?

If not, as many as favor the motion let it be known by saying "aye."

So ordered.

I will ask Dr. Johnson and Dr. Hill, delegates for the AMA, if they would like to give their report now.

Dr. Johnson.

DR. AMOS JOHNSON: Mr. President, as soon as I saw Dr. Hill was here, I attempted to acquiesce in giving this report and he asked if I would go ahead.

There was a Resolution 12 which is opposed to the amendment to the Food and Drug and Cosmetic Act dealing with proof of efficiency. I will read the Resolves and the pertinent portion of that:

That the American Medical Association attempt to have these provisions authorizing the determination of effectiveness of drugs by the Food and Drug Administration removed from the Kefauver-Harris amendment, and

BE IT FURTHER RESOLVED That every effort be made to prevent the enactment of similar federal regulatory legislation with regard to devices and implants, and

BE IT FURTHER RESOLVED That all constituent and component medical associations be urged to join in this effort by soliciting the support of their senators and representatives.

This was adopted by the House of Delegates of the American Medical Association.

This next one was Resolution 18 which dealt with Community Health Project Grants and has one Whereas and one Resolved.

Whereas successful implementation of the Community Health Projects is dependent upon the understanding, interest and cooperation of the local county medical society and allied health-oriented agencies and organizations in the development of community-wide programs,

THEREFORE BE IT RESOLVED That the House of Delegates of the American Medical Association recommend to the Public Health Service, United States Department of Health, Education and Welfare, that applicants for community health project grants be required to consult with and document the reaction of the local county medical society and affected community groups in all community projects relating to personal health services.

In other words, that those who do not want something not be afflicted with having it forced upon them.

Resolution No. 21 dealt with membership in the local, state and United States Chamber of Commerce. That was approved also.

The pertinent resolves are:

RESOLVED That the House of Delegates of the American Medical Association reaffirm its previously adopted recommendation to all state medical societies that they become active in the United States and state chambers of commerce, and

BE IT FURTHER RESOLVED That a similar recommendation be made to all county medical societies so that they too might be encouraged to become active in local, state and United States chambers of commerce programs.

This was adopted also.

A supplementary report from the Board of Trustees dealing with blood banks:

The American Medical Association's Committee on Blood believes that components and constituent medical societies should be informed of proposed and existing blood banking service within the community and should offer guidance to them. In the opinion of the Committee it is desirable that the organization of new blood banking programs and the modification of existing ones should have in the interest of public health and safety the approval of the county or district medical society and should be coordinated with existing approved blood banking facilities.

That was approved also.

From the remarks of the President, the Reference Committee on Reports of Officers in commenting on the President's address to the House of Delegates strongly recommended that copies of the AMA testimony before the House Ways and Means Committee of November 21, 1963, be made available to each delegate, state and county medical societies and to the Women's Auxiliary.

The American Medical Association testimony is now being printed and will be sent to all indicated as soon as possible.

That, along with the action which you are aware of as pertained to the tobacco situation—the American Medical Association did not take any strong action pertinent to that—and along with the resolution which was introduced by your North Carolina State delegates, Dr. Clark did the introducing, relative to ophthalmologists, that is, that ophthalmologists be on all federal boards looking into eye problems and the service, et cetera, was introduced and was looked upon with favor.

I have a little later some actions that are a little bit pertinent that the Board of Trustees of the American Medical Association took after the meeting of the House of Delegates in Portland in December, passed. I want to make an observation or two and I am glad Dr. Hill is here and if he disagrees with me, he will have an opportunity to say so when I am through.

I am a little bit concerned about the stature of the Board of Trustees of the American Medical Association. I think Dr. Hill is also, because he was on the Committee that was appointed two years ago to study this organization and he did recommend that the Board of Trustees of the American Medical Association be increased in number in order that we might put some new blood in and give them a transfusion.

I have finished, as of now, two years as representative of the Medical Society of the State of North Carolina, as a delegate to the House of Delegates of the American Medical Association, and I have had some opportunities to know real well and observe some of the actions that the Board of Trustees have taken.

I would love to have seen something happen that has not happened. I would have loved to have seen Dr. Annis not President this year. He was a popular choice and most everybody voted for him. I would have loved to have seen him come up through the Board of Trustees as a trustee and exert his influence not for two years or basically one year but over a longer period of time so that there could have been some reflection to his statesmanship and ability to lead.

I am concerned that on the Board of Trustees we have a group of people who are more interested with local and intra-disciplinary problems, concerned with their own well being in medicine more than they are with the overall picture of medicine.

I am concerned that we have some who are more interested in whether or not they will be re-elected or whether or not they will be chairman of the board or whether or not they will be president-elect than they are in what is good for medicine.

I am also concerned that the Medical Society of the State of North Carolina perhaps is not as actively concerned with this as maybe they should be.

I recall in the two years that I have been representing the state as a delegate that we have had only one resolution from North Carolina to the House of Delegates of the American Medical Association, and that was one that George Noel and the Ophthalmologists were interested in and which you all directed us to put in this year.

The American Medical Association is a group organized to govern medicine from the ground up and if the state associations do not take an interest in this, then it will be run from the top down, as indeed our federal government has come to be run. I say this without any criticism. I think those of us who are interested in it and who are delegates there should report to you and should be active in helping to stir up an interest that will be reflected in resolutions.

It is not right for one-fiftieth of the government, the control of an association, to not have some directives coming up from that one-fiftieth portion, and I think that we should give some thought to this.

I apologize for having said that but that is the way I feel about the American Medical Association. I went, when I was President of this organization, to Davidson County by invitation to come and explain to them why they should remain members of the American Medical Association.

After talking with them a reasonable length of time, I had turned the tables on them by asking them when they had brought to the State Medical Society a resolution expressing their dissatisfaction with the American Medical Association. I asked them how many delegates North Carolina had to the American Medical Association and they didn't know.

I will lay you a wager that I can start down and go around this table, here, and not 50 per cent of you will know how many trustees there are of the American Medical Association.

The House of Delegates, the Board of Trustees took a few actions as to tobacco and health. The Board voted that an official request be sent to the AMAERF asking that it accept responsibility for the House-endorsed research program on tobacco and health, and appropriated $500,000 as an initial grant for this project.

That I think was favorable to us in our position in North Carolina.

The Board voted that a delegation of the American Medical Association composed of the President, President-Elect, Chairman of the Board and Speaker of the House of Delegates, Dr. R. B. Robin, with the Executive Vice President, and Assistant Executive Vice President, meet with President Lyndon Johnson if arrangements can be made. That's a token meeting with the President and after some of his expressions as to his stand on Social Security and medical care, I don't know what that is going to accomplish.

Authorized a development by the Committee of Medicine and Religion of one or more exhibits to be used at state and county medical society meetings and health fairs as well as at other gatherings of interest, a workshop conference for the state and county medical chairman of Medicine and Religious Committees to be held just prior to the AMA Annual Meeting in San Francisco.

There is an exhibit that we can get for our state meeting pertinent to religion and medicine and it is also available at a lesser level for lesser or county meetings.

That's about all of interest that I think of.

Millard, do you think of anything else that happened there?

DR. HILL: No.

DR. AMOS JOHNSON: Do you have any comment on what I said about the Board of Trustees?

DR. HILL: None.

(Dr. Patterson assumed the chair.)

DR. PATTERSON: Thank you, Dr. Johnson. How many trustees are there?

DR. AMOS JOHNSON: 12.

DR. PATTERSON: Any other discussion?

Any recommendation on this report?

DR. HARRY JOHNSON: I move it be approved.

(The motion was seconded.)

DR. PATTERSON: All those in favor say "aye."

(A chorus of "ayes.") (The motion carried.)

(President Rhodes resumed the chair.)

PRESIDENT RHODES: Now, I'll ask Dr. Styron

if he will read the Report of the School Health Committee.

DR. STYRON (School Health Committee): The Committee on School Health at its session on Thursday, September 26, 1964, at Mid Pines Club, made the following recommendations:

Recommendation was made that the Medical Society of the State of North Carolina through its component county societies seek to implement a program of pre-school clinics to be conducted through the months of April, May and June and be manned on a voluntary basis by a local physician to provide the medical supervision for completion of the standard pre-school examination forms and for completion of the necessary basic immunizations as required by law.

Nothing in this action should be construed to mean that all children must attend pre-school clinic as sponsored above, since it is the intention of the action only to provide this service to those who might not otherwise receive it.

The intent behind this motion is that for a period of some three years the program will be on a trial basis and at the end of that period the entire program will be re-evaluated.

Following this motion, the second motion was made and carried that this above recommendation be referred to a committee composed of Dr. Frank Barnes and Dr. Ted Scurletis for study and concrete planning for implementation, the committee to report at the January Executive Council Meeting.

Respectfully submitted. This is from the Committee on School Health.

PRESIDENT RHODES: You have heard the Report of the Committee on School Health.

I presume that we can let this stand as information and defer any action until we get a report from the subcommittee.

DR. BRIDGER: I move that it be received for information, then.

(The motion was seconded.) (The motion carried.)

PRESIDENT RHODES: I would like to ask Dr. Richard Kelly, Chairman of our Polio Immunization Committee, if he will report at this time.

DR. RICHARD KELLY (Chairman, Polio Immunization Committee): We have not met since September at Mid Pines at which time we recommended to you that we have the county option mass programs. After your approval of that recommendation we have contacted various component county societies, encouraged them to implement their own programs.

Since that time we have made ourselves available for coordination of programs, advice when desired and, I think by and large, from the number of counties I have heard from the great preponderance of the societies will implement the mass polio program between now and summer.

PRESIDENT RHODES: Thank you, Dr. Kelly.

You have heard this report. What shall we do with this report?

DR. PATTERSON: I move it be accepted.

PRESIDENT RHODES: Is there a second to that motion?

DR. GARRISON: Second.

PRESIDENT RHODES: It has been moved and seconded that we accept the report of the committee. Any discussion of this report?

(No response.)

If not, so many as favor the motion, make it known by saying "aye."

The motion is carried.

PRESIDENT RHODES: Mr. Anderson.

MR. ANDERSON: I have been asked by Dr. John Lynch of Guilford County in conjunction with Mr. Barnes to look into the question of whether the sales tax would apply to this vaccine.

I am afraid it will but I presume you will want to follow that through and we will do it in Raleigh. That is just for your information.

PRESIDENT RHODES: I think that is in order.

DR. KELLY: There is one question that I might mention that has been posed to me, the question of liability. Maybe somebody knows. If not, I will try to find out.

PRESIDENT RHODES: Dr. Styron.

DR. STYRON: The problem of what to do with the funds has come up in Wake County and we met and I suppose it is no secret what we are going to do, we are going to use half of it for the total immunization program of the Department of Public Health and the other half we are going to use in the school libraries throughout the county.

I think often you may decide quickly what you are going to do with the funds and you may simply be putting the money into something that is going to operate well anyway, whereas, if you do have some consideration on what can be properly done with the money you may spend it a good deal more wisely. So that we had a committee in our county, on which I served, which made this decision as far as we were concerned.

PRESIDENT RHODES: Thank you, Dr. Styron.

PRESIDENT RHODES: Consider Mecklenburg letter on Dr. J. V. Scott membership in Mecklenburg or Gaston Counties Society. Dr. Bivens to discuss.

DR. EDWARD S. BIVENS: This is a matter of a doctor living in one county and practicing in another county, in which county shall be pay his dues, or which county gets him as a member for representation to receive an additional delegate, which county gets any help from him?

I have written to him. I had several letters from Jim about it. Usually this matter comes up and is settled rather quickly. This has taken a little longer. To my knowledge, this is the third one since I have been a council member that we have had.

I would prefer for Jim to speak on what the legal end of it is.

EXECUTIVE SECRETARY BARNES: I hope that Mr. Anderson will be listening. Of course, what is involved, as we see it under the Constitution and By-laws, a physician settles for practice and is granted a license by the North Carolina Board of Medical Examiners and is required to register that license with the Clerk of the Court in the County in which he resides or practices. That is the State law, now, that's not our by-law.

MR. ANDERSON: Where he resides or practices.

EXECUTIVE SECRETARY BARNES: Membership in a county medical society is supposed to be certified from the county in which one resides and, if he is living near the line, he may request that his membership be granted to him in the other county, if it is more convenient to him from the standpoint of service to his patients, and that sort of thing.

Since the year one that has been done in North Carolina. But in this particular case the man practices and serves people in Gaston County, that is where his medical services are rendered, with the exception, perhaps, of his hospital cases, which he takes to Mecklenburg.

Mecklenburg has received an application from him and has approved him and made him a member of the Mecklenburg County Medical Society and the Gaston County Medical Society has declined so far to give permission for him to have membership in the Mecklenburg County Medical Society.

They feel that since he practices in Gaston County, he's involved with patients that are related to to public service in Gaston County, that he should be a member of the Gaston County Medical Society.

So we have not been able to complete his registration at the state level.

Dr. Bivens has requested him to apply for and secure membership in the Gaston County Medical Society and we have instructed him to do that, and then nothing happens.

There is another case of a doctor living in Greensboro who has set up his practice in Forsyth County and who tells us that there is reason for continuing to live in Greensboro, he owns a home there, and he has been trying to sell it and he could not sell it, and as soon as he sold his home he was going to move to Forsyth County, and his registration hasn't been completed.

DR. RAIFORD: Jim, is there anything to prevent his belonging to both societies?

EXECUTIVE SECRETARY BARNES: No, sir, there is not.

Dr. Bridger, here, for instance, has been a member and counted in the delegation of Bladen County where he lives and practices but he desires to have membership in the Robeson County Medical Society.

DR. BRIDGER: About two-thirds of our doctors have it in both societies.

DR. PASCHAL: For this man to comply with our by-laws, he needs to register and record his license in Gaston County and belong to the Gaston County Medical Society.

PRESIDENT RHODES: Or get a release from the Gaston County Medical Society.

DR. ANDERSON: The by-laws says if he lives near the line of a county and it is more convenient to join one of the other he can join whichever one is more convenient upon first getting permission of the society in whose jurisdiction he resides.

EXECUTIVE SECRETARY BARNES: It is up to this Council to interpret the by-laws of the state society.

PRESIDENT RHODES: Ed, what action do you want us to take here?

MRS. KING: Mr. Barnes, there has been an addition to that By-law, Section 9.

PRESIDENT RHODES: Just read the addition to us.

EXECUTIVE SECRETARY BARNES: Section 9 reads as follows; totally:

A physician living on or near a county line may hold his membership in that county most convenient for him to attend on permission of the society in whose jurisdiction he resides.

A member of one component society may also be admitted to membership in another component society without paying or being included for payment of additional dues to the state society with the consent of the component society of the county in which he resides where such additional membership is required for hospital staff privileges.

DR. BIVENS: Mr. President, I would recommend that this be received as information and that the Council continue to work on it. I have not contacted the man personally. I have contacted him by telephone and by letter and I believe that with the doctor and the president of each county medical society concerned we can get it handled.

PRESIDENT RHODES: Do I hear a second to this motion?

DR. GARRISON: Seconded.

PRESIDENT RHODES: Any further discussion?

(No response.)

As many as favor the motion indicate by saying "aye." (The motion carried.)

PRESIDENT RHODES: The next item is the AMA Delegates. Mr. Barnes.

EXECUTIVE SECRETARY BARNES: I simply want to report that as of January 10th the Circulation and Records Department of the American Medical Association indicated that we had 3,153 members in standing for the year 1963 in the American Medical Association which entitled us to continue the election of four delegates to the

AMA, and the Nominating Committee has been advised that they should bring nomination slates for two successor AMA delegates in May.

PRESIDENT RHODES: I don't believe we need any action on that.

Next, Hospitality Room at the AMA Meeting.

EXECUTIVE SECRETARY BARNES: I will simply report that the Committee of the Southeastern States did meet in Portland and considered the continuation of the Hospitality Room which they had proposed to do, and here is the report which is not too brief.

PRESIDENT RHODES: Summarize it for us.

EXECUTIVE SECRETARY BARNES: In substance it is this, that they will continue to have the hospitality room at the annual meeting of the AMA, and that Florida and Mississippi will be added to the Southeastern area and participate in the expense thereof on a pro rata basis.

PRESIDENT RHODES: Do we need any action on that, Jim, approving it?

EXECUTIVE SECRETARY BARNES: I think that we would not want to be paying out of this hospitality fund without the continued approval of the council.

PRESIDENT RHODES: Do I hear a motion?

DR. REECE: I move we continue to participate in this program.

DR. BRIDGER: I'll second it.

PRESIDENT RHODES: Any discussion of the motion?

(No response.)

So many as favor that the North Carolina Medical Society continue to participate in the Hospitality activities of the Southeastern States at the AMA Convention make it known by saying "aye."

It is so ordered.

Now, Dr. Raiford, do you have any report for the Blue Shield Deputation Committee?

DR. RAIFORD (Blue Shield Deputation Committee): Very brief. Negotiations are still under way and Hospital Care wants to have a joint meeting of the complete boards of the two associations. Hospital Saving wants a joint committee meeting first. They are in the process of resolving this now. I think it will be decided on Tuesday at the Hospital Care Meeting. I have a very strong suspicion this will be settled within the next month or two, but for the life of me I cannot tell you which way, because they are still in the process.

PRESIDENT RHODES: We will receive that for information.

Next is the statement of the Committee of Physicians on Nursing.

EXECUTIVE SECRETARY BARNES: Just a statement. The Committee of Physicians on Nursing at its meeting of January 16, 1964, at High Point adopted the following resolution.

The Committee of Physicians on Nursing is interested in and concerned about improving the nursing educational facilities and opportunities in North Carolina. Modernized, better equipped and staffed nursing schools supported with funds from broad financial bases are essential to attract students to nursing as a career in increased numbers and to graduate the well-trained nurses that are required to continue to provide the high quality health care that is desired.

To receive more and more information about nursing education in North Carolina and to discuss how the medical society can be of service in promoting improved nursing care and education, the followup committee of this committe will be held on Thursday, March the 5th, 1964, in Burlington to which representatives from the North Carolina Nursing Association, the North Carolina Licensed Nurses Association, the North Carolina Hospital Association and resource persons from the North Carolina Department of Education will be invited to attend.

I believe this committee has recommended also, Dr. Rhodes, that an allocation of $50 be made to this committee's activity or to the Committee on Nursing and Patient Care.

And we wanted to report that the Hospital Association has contributed $50 and to know if it is all right for us to have that too.

PRESIDENT RHODES: I think we've already authorized that.

We will receive it for information.

One other thing which I might call to your attention. Most of you have seen this plaque which has been developed to our Dick Nelson. We think it's real attractive and it will be presented at the Annual Meeting in May.

There is one other thing. The Academy of General Practice is undertaking a statewide survey to be implemented by the Department of Preventive Medicine of the University under the direction of Dr. Dan Martin and Dr. John Huntley.

It is to determine the content of general practice in North Carolina, and they have established an advisory committee consisting of representatives from all of the specialties and from medical schools and from the medical society to advise them as they proceed with this survey.

I think it might be well for me to read the aims of the survey for your benefit:

A, to define the content of general practice in North Carolina.

B, to define some of the factors influencing the content of individual practices where these practices deviate markedly from the observed averages.

C, to determine similarities and differences in the content of general practice and those specialty practices included in the study, because it is generally agreed that many specialists (internists, pediatricians, obstetricians and general surgeons) function to a varying extent as personal or family physicians.

Finally, it is hoped that these findings will be of

interest to those responsible for medical education as well as to those interested in the most rational organization of medical practice.

This survey is pretty well formulated.

I think what we need to do here is decide whether we would endorse this type of survey and I shall now ask for a motion of any action you might take on this proposal.

I think the general practice members realize that out of this might come some things that are not too favorable on their part as well as things that might be favorable, but they have done this, they have established a contract whereby, if the Academy of General Practice does not publish this report within a year of its completion, then the surveyors themselves will have the right to do so.

In other words, it will be published, regardless of what the outcome is.

Do I hear any discussion or any motion that we endorse this in principle?

DR. BEDDINGFIELD: Dr. Rhodes, I don't know all about this, but I know this, that whatever the source of funds was for doing this study that some of the academic people were a little bit unhappy that they didn't get the funds, but the funds are under the control and therefore the ground rules for the study were written by the Education Committee of the Academy of General Practice.

PRESIDENT RHODES: The funds come from the Cancer Control Program of the U. S. Public Health Service.

DR. BEDDINGFIELD: That's right.

I think that the interest of private practice, both specialty practice and family practice, will be served by this study.

I think the way the study first came about was there was some criticism of internship and residency training, particularly that set up for general practitioners, and this was criticized from many different sources, people out in private practice, both general practitioners and specialists. The academic people at the medical schools said, well, what is general practice? How are we going to train? And you can find about as many definitions for general practice as you can people trying to define it.

This study was an outgrowth of what is general practice in North Carolina? Who is doing what?

I think the study is off on a good footing. It is not a hastily conceived project, and I make a motion that we endorse this as a society.

PRESIDENT RHODES: Thank you. Is there a second to the motion?

DR. RAIFORD: I'll second the motion.

PRESIDENT RHODES: I might say further that the medical schools have approved this program and as a matter of fact, Dr. Woodall was present at the last meeting and so were representatives of the other medical schools. So that it is approved by medical schools, and I am sure that Dr. Beddingfield is right that this came about partly because of the concern with the training of general practitioners in our medical teaching centers.

Any further discussion?

DR. WILLIAMS: Mr. President, I expect to vote for this motion but I would like to point out one thing, that when you start making surveys you start forming public opinion many times, and I certainly hope that the people involved in this, and I think they will be, remember that when something like this is published, the press and the public in general may get hold of it and it is awfully easy for impressions to be conveyed that something is not well within the practice of medicine.

PRESIDENT RHODES: I think you're very right.

EXECUTIVE SECRETARY BARNES: I think that can be substantiated by the survey which was made in the early fifties which was published and there was national and international publicity given to that and in some points it was not complimentary to the North Carolina Medical practice.

PRESIDENT RHODES: I think that perhaps would be something that the advisory committee would keep an eye on and I think that is one reason the advisory committee was established.

So many as favor the motion make it known by saying "aye."

(A chorus of "ayes.")

Opposed "no."

(No response.)

It is so ordered.

We will go to the Report on the Progress of Relative Value Study, and I did not think there was any progress so I passed it up, but I will ask Mr. Barnes to relate what Dr. Bugg has conveyed to him.

EXECUTIVE SECRETARY BARNES: I will simply say this, he called me Thursday afternoon and said that he had no progress to report other than that following his commission at the September meeting of the Council he had notified all of the committees of the several specialty groups, asked them to check the North Carolina relative value scale and to secure their own copies of the California relative value scale adopted in 1960 by the California Medical Association, and to bring their system of fees in their specialty into conformity.

He said he had no progress report from any one of the specialists except his own, which is orthopedics and traumatology, and that that schedule, as adopted in the North Carolina relative value scale was in many ways more satisfactory than the California scale and that they were going to recommend that their part of the scale at least be continued as the policy of the State Medical Society.

I do know that there are some committees ap-

parently interested in this and active to one degree or another because they have called me or written me for copies of the California schedule and I haven't been able to furnish it.

Dr. Bugg has advised me specifically not to secure it. His instructions to these subcommittees were to get their own. We have no copies of it.

PRESIDENT RHODES: This is a problem which seems to me to create more and more confusion because, as you know, some of the government agencies have already begun to use the previously approved schedule of the North Carolina Medical Society and there is a good bit of confusion among our membership about this whole matter.

If you will recall the committee requested that it be permitted, inasmuch as they could not get satisfactory reports from some of the specialties, and they could not arrive at a decision regarding our own schedule, that they wanted to approve the California schedule. We approved that plan with the provision that it be referred back to the specialties for their concurrence.

I do not know of any action we need to take here now. Does anyone have any comment to make?

DR. REECE: The pathology group discussed this last week, a week ago yesterday, and we will investigate it and take final action on our meeting in the section.

DR. REECE: The section, yes.

PRESIDENT RHODES: If not, we accept this as information.

Now, if there is nothing further—does anyone have anything further they would like to bring to the Council?

(No response.)

If not, I will entertain a motion to adjourn. I want to thank you all for coming and being so patient and so helpful.

(Upon motion duly made and seconded, the meeting adjourned at four thirty-five o'clock p.m.)

MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA
EXECUTIVE COUNCIL PROCEEDINGS
ANNUAL MEETING
King Cotton Hotel, Greensboro, N. C.
SATURDAY MORNING SESSION

May 2, 1964

The Executive Council Annual Meeting of the Medical Society of the State of North Carolina convened at ten o'clock a.m. in the Wedgewood Room of the King Cotton Hotel, Greensboro, North Carolina, President John S. Kernodle presiding.

PRESIDENT RHODES: We will be in order and Dr. Paschal will give the invocation.

(Dr. George W. Paschal gave the invocation.)

PRESIDENT RHODES: Gentlemen, we have a long agenda today and I would certainly encourage free discussion of all of the items that come before us but I would request that we adhere to the subject at hand. Whether we will be able to complete this agenda today, I am not sure. If not, we may have to reconvene tomorrow morning.

I believe we have Mr. Richard Nelson from the AMA, Field Representation from the AMA. We welcome you, Dick, and we invite your counsel.

I am going to ask Dr. John Robert Kernodle if he will at this moment now take the floor and perform a function for the council.

DR. JOHN KERNODLE: At this time, Mr. President, I am indeed privileged to bring before this Council a statement of recognition for one who has been most cooperative in his efforts to forward the progress of medicine in the State of North Carolina and in the South.

He has helped our administrative office in every possible way during the last several years and certainly he has helped me through the administrative office repeatedly on programming and assistance in programming throughout the State.

This individual has been very cooperative when we wanted to get measures explained to us from Chicago. He has repeatedly at times gone out of his way to help us in these areas, and it is indeed my pleasure at this time, if Mr. Richard Nelson would step forward, to present to him a token of appreciation from the Medical Society of the State of North Carolina.

Dick, it is my pleasure to present to you in behalf of the Members of the Medical Profession of this State and the Council especially of the Medical Society this following plaque which reads:

The Medical Society of the State of North Carolina presents to Richard M. Nelson this testimony in recognition and appreciation of his services rendered to the medical profession of this Society, dated 1964.

(Presentation of plaque.)

We thank you, Dick, for your continued efforts.

(Applause.)

DR. RICHARD NELSON: Ordinarily I do not have difficulty in making speeches and Dr. Rhodes has given me an out this morning in suggesting that everybody keep their remarks on the subject and not to roam too much, but I would like to just make one or two comments.

I certainly appreciate this very much. I would like to accept it as an expression, as you have indicated it, but I also want to carry it and keep it as a recognition of you being a nice group of people to work with.

I have certainly have a great deal of pleasure in working with you and a lot of times we talk about this in terms of jobs, but over and above the fact of our being in this situation this has been and continues to be a pleasure to work with all of you people on the Council and of the State Medical Society, Jim Barnes and his staff, and I certainly have enjoyed it very much.

Quite often when this sort of recognition is given it is done at the point of retirement or the point of severance of the relationship. I hope that I may accept this recognition, this plaque not as a severance in our relationship, but that it is a renewal of my license to have the opportunity of working with you.

Thank you very much.

(Applause.)

PRESIDENT RHODES: Thank you, John, and, Dick. We assure you that this is just an interim award and we will look forward to a long relationship in the future.

At this time we do not anticipate the need for an Executive Session but in such case it would be proper, I believe, to call it at the time we reconvene following lunch.

I shall now ask the Secretary if he will call the roll.

(The roll was called.)

Mr. President, a quorum is present.

PRESIDENT RHODES: We would like to welcome Dr. Jacob Koomen (State Board of Health) who is here in Dr. Dobson's stead and we would also like to recognize Mr. Willis Smith who is here in association with our legal counsel. Will you stand, Willis, so we can greet you.

(Mr. Smith arose; applause.)

Incidentally, Willis' father was the legal advisor to the Medical Society for many years.

We will now ask for a presentation of the minutes of the previous meeting, of the three previous meetings.

EXECUTIVE DIRECTOR BARNES: Mr. President, we have the originals here and we have also prepared an abridgement which constitutes a report which you are to make to the House of Delegates in the Compilation of all of the Members of the Council have had that Compilation.

DR. WILLIAM A. SAMS: I move you, sir, the reading of the minutes be deferred.

PRESIDENT RHODES: Do I hear a second to that motion?

(The motion was seconded and, on vote, carried.)

The minutes are approved without reading.

Discussion of Board structures:

Two members of the North Carolina Board of Medical Examiners for 6-year terms.

Is there any discussion of this matter? These are elected in the general session on Wednesday, two members to replace Drs. Frank Edmondson and Ralph Templeton. They are nominated from the floor at the General Session.

Three members of the North Carolina Medical Journal Editorial Board. This election also takes place on Wednesday before the General Sessions and the nominations are from the floor, three members to be either re-elected or replaced. One of these, Dr. Wingate Johnson, as you know, died in September, the original founder and first editor of the Journal, and Drs. T. S. Raiford and E. W. Furgurson's terms expire this year.

We will move along to Resolutions and Communications:

Letter-documentations from Cornell Automotive Crash Injury Research.

EXECUTIVE DIRECTOR BARNES: As you know, the Medical Society since the early years of the fifties has cooperated in this joint enterprise of the North Carolina Highway Patrol and the State Board of Health and the practicing physicians at the county level in North Carolina in this investigative procedure on all crash injuries sustained by individuals in North Carolina.

They have consistently over the years submitted a report of progress and continuation of that program each year.

They have here a five-page report which we have reviewed and we find it in order, expressing the progress that has been made in this program in the State and we would recommend that it be accepted as information and, of course, published in the records of the Society.

PRESIDENT RHODES: They are presently concerned with Mecklenburg County, are they not, Jim?

EXECUTIVE DIRECTOR BARNES: I believe that is the latest, yes.

DR. SAMS: I move we accept it as information, and endorse this program of continuing action.

PRESIDENT RHODES: Is there a second to that motion?

SECRETARY STYRON: Second.

The motion carried.

PRESIDENT RHODES: Proposed resolution to the AMA on Venereal Diseases.

EXECUTIVE DIRECTOR BARNES: This is a letter communication to which is attached a copy of a draft of resolution to the American Medical Association House of Delegates. It comes from Dr. Howard P. Steiger who is Chairman of the Committee on Venereal Disease of the State Medical Society and reads as follows:

"Draft of Resolution to AMA House of Delegates.

"Whereas the number of cases of infectious syphilis has increased steadily during each of the past six years to a presently estimated incidence of 100,000, and of gonorrhea to one million, and

"Whereas a recent national study indicates that three-fourths of all infected persons are treated by physicians in private practice;

"Therefore" and it is proposed "the Medical Society of the State of North Carolina recommends to the Delegate Body of the American Medical Association here assembled to take official cognizance of the resurgence of syphilis and gonorrhea to the proportions of a national health problem; that it initiate through appropriate channels of the AMA a comprehensive inquiry of the causative factors for this sharp increase in diseases for which a separate cure is now available; that it take leadership in educational and research measures designed to control and eliminate syphilis; and that it provide guidance to private physicians in the epidemiology of the venereal diseases and of their social implications."

If this resolution is to be taken by our Delegates to the AMA, it should have the endorsement of the State Medical Society.

PRESIDENT RHODES: There has been an upsurge, as most of you know, in the incidence of venereal diseases, this is nationwide and I would like to hear what you wish we do with this resolution.

Dr. Koomen, do you have any comment about the resolution?

DR. JACOB KOOMEN: I think that our state experience parallels closely the national experience. We felt that in the early fifties there was a lag nationally accompanied by the presence of very good drugs and we were lulled into the belief we could perhaps treat these diseases out of existence.

This turned out to be untrue and perhaps because of a new welfare society and high mobility and the enormous number of teenagers we have slipped steadily downward. The ages of the disease are now frequently occurring between the ages of 15 and 19; so far as our own state is concerned we do share in this, and it is quite clear new measures will be taken and strong support needs to be given to them especially by the private practicing physician. Because somewhere between perhaps 75 to 80 per cent of the cases these days are seen by those in private practice, where as once the reverse was true, these were seen by the public clinic.

So that the effort of the private clinic in the eradication of this disease is extremely important.

PRESIDENT RHODES: Thank you, Dr. Koomen.

Do I hear a motion that we endorse this resolution to the AMA and transmit it to our Delegates to the AMA?

DR. T. P. BRINN: I so move.

DR. HARRY JOHNSON: Second.

The motion carried.

PRESIDENT RHODES: Durham-Orange County Medical Society letters regarding delegate structure to the House of Delegates.

Jim, I believe you have something on that.

EXECUTIVE DIRECTOR BARNES: President Rhodes, this letter was received on the 5th of March, the Committee on Constitution and By-laws had not met, nor did they have a scheduled meeting at that particular date.

Since then the Committee on Constitution and By-laws has met and considered the problem set forth in this letter, and I believe they have drafted a revision that probably will take care of it and I believe you will reach that on the agenda of the Council meeting today when the report of the Committee on Constitution and By-laws are presented.

Now, whether or not you want the content of this letter presented to you now as information or then?

PRESIDENT RHODES: May I just make a comment, Jim? The substance of the letter is a problem which arose as to whether or not delegates should be allotted in hyphenated county societies on the basis of the membership in each society or whether it was proper to have an imbalance of delegates, and the By-laws require, as you know, that each county have one delegate, but heretofore it has been the custom to allot delegates on the basis of the number of doctors in the individual counties, even in hyphenated county societies.

This matter arose because the Durham County Society overbalanced the Orange County Society in the number of delegates selected. That's the problem.

This we will sum up later.

EXECUTIVE DIRECTOR BARNES: And in substance it was due to the fact that they had incorporated in their constitution and by-laws some provision that the current officers of the hyphenated society had priority as delegates. In other words, the president and vice-president and secretary have priority and they don't know from one year to another who those officers are going to be because they are elected.

PRESIDENT RHODES: Shall we defer this until the discussion that comes under the report of the By-laws Committee?

DR. BEDDINGFIELD: I would like to raise one question.

PRESIDENT RHODES: Dr. Beddingfield.

DR. BEDDINGFIELD: Is this part of our Constitution of this State Medical Society that no component County Society shall have anything in its constitution and by-laws at variance with our own State Constitution and By-laws?

I think maybe this would be a case in point.

PRESIDENT RHODES: Yes.

DR. BEDDINGFIELD: And they have an invalid by-law then.

PRESIDENT RHODES: We will pass along then and that will come up later.

Report of the AMA Congress on Medicine and Pharmacy. This is a written report, a very comprehensive one that was submitted by Dr. John T. Dees of Burgaw who attended this conference. It is about a four or five page report and if I may I am going to ask Dr. Beddingfield if he will just give a brief summary of this and the affairs that took place at this conference.

Dr. Beddingfield.

DR. BEDDINGFIELD: Thank you, Dr. Rhodes.

This First National Congress on Medicine and Pharmacy apparently came about because of discussions in recent years in the AMA House of Delegates about the matter of ethics involved in physician ownership of drug stores.

This issue has been batted back and forth between I think the Board of Trustees and the Judicial Council and the House of Delegates of the AMA and there has been some vascillation in establishing just what is ethical and what is unethical.

The National Pharmaceutical organizations have been rather unhappy with the most recent decision and medicine has been subjected to considerable criticism from pharmacy at the national level.

In an effort to sit down and talk this thing out, the First National Congress on Medicine and Pharmacy was sponsored jointly by the American Medical Association, the American Pharmaceutical Association and the National Association of Retail Druggists.

Dr. Dees attended as a delegate from this state, and I was there, having had a small part on the program. It was, I thought, a very constructive and very worthwhile meeting. All aspects of relationships between the two professions were considered during the course of the two-day meeting, but the thing that attracted the most attention was this discussion of physician ownership of drug stores.

I think that this is of more than passing interest because of this: One of the national pharmaceutical organizations has recommended to its members that they make an effort to secure legislative relief and make it illegal in the various states for the physicians to own any part of a drug store and indeed such a law has been enacted in the State of California and a model state statute has been drafted and sent to all states with the recommendation that they try to get it enacted in their state legislature.

It was in an effort to head off this sort of head-on fight in legislative halls that this National

Congress on Medicine and Pharmacy was called. The representatives of medicine listened attentively to the attitudes that were espoused by the people from pharmacy and there was some criticism of the pharmacists from the medical people there.

Several states have had very little problem in this area and it appears that in many instances it is a matter of communications.

For many years in North Carolina, of course, we have had a liaison committee between medicine and pharmacy which has in various years had varying degrees of activity. It hasn't been too active recently.

In some states they have had a very active liaison committee and have drawn up codes of understanding between medicine and pharmacy and this seems to have paved the way for smoother relationships.

I believe that this subject will be the subject when the AMA meets again and I do not know what the House of Delegates will do but I believe it will again be up to their consideration, probably as a result of some of the things that came out of this Congress. This was the prediction of some of the physicians in attendance.

It appears that there is a trend with the growth of suburbia for a group of physicians to enter into group practice in a shopping center, to build a building and to incorporate in that building a pharmacy and this is frequently called a clinic pharmacy. Sometimes the physicians maintain title to the drug store and the ownership themselves and hire themselves a pharmacist to operate it.

There are those who feel that this is not in the best interest of the patient. Various degrees of coercion have been used to require patients from that clinic group to go to that clinic pharmacy; no degree of coercion in many cases; to rather extreme pressure in other cases; and, this is the sensitive area to which the pharmaceutical organizations object.

In many states there has been an increase in the last 10 years, year by year, in the number of physician owned pharmacies. On the one hand, there are physicians who hold that it is in the best interest of patients for them to own the drug store, that this has been done to relieve the patient of exploitation by the pharmacists and there are physicians that hold a physician should have the right as an investment approach to invest in whatever business he wants to, including drug stores; whereas, on the other hand, the pharmacists hold that this is never in the public interest and that greed is never ethical.

It is of interest in that connection that here in North Carolina out of 1,000 licensed drug stores 53 pharmacies are owned by physicians in some degree, from complete ownership to less than five per cent ownership.

The pharmacists here in North Caronina feel that we do not have as much of a problem as many of the other states do. They are keeping a weather eye on it and they would not like for it to become more of a problem. I have not had any indication from their Legislative Committee that they would seek any legislative relief. I believe that we are far from that and I hope we can stay far from that in North Carolina.

I think that this is of enough moment nationally and our pharmacists are getting enough barrage of information and literature from outside the state and the national organizations that we should perhaps in the next year encourage our Committee on Liaison with the Pharmaceutical Industry to be more active and to perhaps sponsor some sort of a joint meeting similar to the Congress on Medicine and Pharmacy at which these problems might be aired.

Dr. Dees made two recommendations at the end of his very comprehensive report. The first is identical with the one that I have just made: that a meeting be of liaison committees of the two professions in North Carolina to discuss the inter-professional relations.

Second, that the organization of the two professions develop a code of inter-professional relations and stress adherence to the code.

Unless there are questions, I believe that pretty well summarizes it.

PRESIDENT RHODES: You say there were some projected regulations that had come out of the pharmaceutical association in relation to the operation of hospital pharmacies.

Would you make some comment about that?

DR. BEDDINGFIELD: I would like to amplify that a bit because I think it kind of overlaps in the mind of the Legislative Committee to a degree.

The Secretary of the State Board of Pharmacy Examiners, Mr. H. C. McAllister, has in recent years submitted a number of questions to the Attorney General of the State for clarification and interpretation under the Pharmacy Practice Act and he has received a series of opinions, and in these opinions it has been held pretty clearly that, for example, in the physician dispensing of drugs, this is a sore area, that it is indeed legal for a physician to dispense his own drugs to his own patients. His nurse may not do it, according to the last legal ruling that we have, and no one else in his office may do it. He must personally do it in each instance, otherwise he is violating the Pharmacy Practice Act.

It has likewise been held in the latest opinions to be illegal for a nurse in a hospital—let us suppose a drug room, that the nurse in charge has a stock bottle of a given medicine in the drug room and that she refills at the variouse nursing stations daily or periodically a supply for nurses from this stock bottle, she is violating, and the hospital is, violating the Pharmacy Practice Act.

Industrial medical facilities that have a little

plant medical facility that are using medications are violating the Pharmacy Practice Act unless they have some sort of an arrangement on a contract basis with a consultant pharmacist.

Nursing homes and rest homes are thought to be in frequent violation, and there is some indication to me in seeking these instances and in trying to seek relief that there may be some areas of friction between our profession and the profession of pharmacy.

It is my personal judgment that they are moving too fast, too far and it is a matter of record that in the number of registered pharmacists per 1,000 population North Carolina ranks 48th in the number of states. We are trailed only by Puerto Rico, Alaska and Hawaii.

We are barely meeting the attrition rate. There is only a single school of pharmacy in this state, at the University, and the number of graduates barely equals the number that die, retire and emigrate each year.

Theerfore, it seems to me to be a poor choice of timing to try stringent application of the law as interpreted by the Attorney General, and I have transmitted these personal feelings to the Board of Pharmacy and will continue to do so.

I hope that we can stay out of the Attorney General's office and out of the halls of the legislature in our relationships with this sister profession.

PRESIDENT RHODES: Thank you, Ed.

Dr. Brinn.

DR. BRINN: May I ask a question? Was there any thought brought up as to the prescribing and the practice of medicine by the pharmacist?

DR. BEDDINGFIELD: The whole area of inter-professional relationships was covered and I have stressed this matter of physician ownership of drug stores because it was the most controversial thing, but during the course of the two-day meeting the entire gamut of inter-professional relations was discussed and the leaders in pharmacy frankly acknowledged that there is fault on both sides, and that even in some of the situations where you have physician-owned drug stores you have a registered pharmacist working for them on a percentage basis, and as the saying goes, "it takes two to tango"; if one's unethical, so is the other.

PRESIDENT RHODES: It seems that perhaps the best thing the Society can do is to encourage its committee liaison to pharmacy to become more active in these matters and I think in that way we might avoid any confrontation about them.

I believe Dr. John Dees actually represented the Committee at this Conference and I should like to hear now what we will do with his report and his recommendations.

Read them again.

DR. BEDDINGFIELD: He recommended two things: a meeting between the two professions be held in this State and that at the end of this meeting an attempt be made to draw up a code of understanding between pharmacy and medicine.

Incidentally, the pharmacists, since this meeting in Chicago have indicated to me that they would be amenable to such a suggestion. I believe it is the best avenue and to expedite things I would move the adoption of the report and the recommendation to the incoming president that this be passed along as a committee duty to this liaison committee on pharmacy, charge them with this responsibility, whoever might be on that committee during the next year.

DR. THOMAS L. MURPHY: I'll second that.

PRESIDENT RHODES: Dr. Murphy seconds it.

DR. RALPH B. GARRISON: Mr. President, just speaking to this report in one drug store the physician owned stock and would write prescriptions and he would not give that code or anything to any other drug store.

This developed into a right serious problem.

Another thing is the hospital, that have this package of drugs, and unfortunately they have a training school for nurses. It's not an uncommon thing for these nurses to go in and have a patient come in and say, I want some more of those pink pills. Here, this little student nurse runs out there and gets a little red box of pills to give the patient and that's about the way it works.

I think this problem is really a little bit greater than a lot of us really realize and I think we should give a lot of attention to it.

PRESIDENT RHODES: Dr. Garrison, I believe, in some of these so-called clinic arangements that they actually, in the doctor's office, had a mechanism by which they would write the prescription and it would record in the pharmacy as they wrote it and when the patient arrived at the pharmacy the prescription would be ready.

Any further discussion? John.

DR. KERNODLE: Mr. President, I would just like to insert one thing that I am wholly in favor of this liaison between the pharmacy association and ours. They are begging for help in this area and I say that because of my recent contact with Mr. W. J. Smith and others in the pharmacy association who have joined up with the associated professions. They are begging to help these things be corrected through education, through increasing pharmacy student education and the like and I think we are going along the right track to endorse this program as recommended.

PRESIDENT RHODES: Mr. Nelson, do you have some comment?

MR. NELSON: You might want to call the attention of your committee on pharmacy to the fact that the Harris Committee of the House of Representatives is doing some preliminary investigative work in this area of pharmacies and also in the area of drug repackaging.

Our records are at AMA. They asked for them. We gave them without any legal entanglements. They are concerned with this area of the physician-pharmacy relationship and any unethical things that may be happening.

They are looking for specific cases of unethical activity. We anticipate that there may well be hearings. We have had conflicting reports that these hearings are being done for merely an investigative purpose on the one hand and another source saying to us that these are being done with the anticipation of suggesting federal legislation.

I know this is a very difficult kind of thing but your committee may want to look at this as a protective measure, to take a look at these 53 pharmacies that you have in North Carolina where you have this measure of ownership and if you are called upon then be prepared to be able to discuss the ethicalness of these operations.

As I say, this is a difficult thing to get into but if you are faced with them in Washington making accusations about some of your people here it might be well if you were beforehand prepared to deal with it.

PRESIDENT RHODES: Thank you, Dick. I believe that information perhaps adds urgency to the fact that we should move forward in this area.

DR. BEDDINGFIELD: Dick reminded me of one other thing that I meant to say. As a matter of fact, the Senate Committee, Senator Hart's on Antitrust and Monopoly Committee, is investigating this same thing and they had a committee lawyer at the Congress of Medicine and Pharmacy in Chicago and this committee lawyer, who I talked to informally at a cocktail party, happens to be a North Carolinian.

But she says that they mean business and in this physician-ownership and in this Hart Committee which is, of course, is the successor to the Kefauver Committee, they are investigating this thing, and very vigorously.

PRESIDENT RHODES: The motion is that we approve the report of Dr. John Dees acting for the committee and endorse his recommendations in reference to activity within the committee.

DR. SAMS: Mr. President, I think that is a very timely thing and in furtherance of that, I think this committee ought to investigate this Medicare Program and also our Mental Health Program.

From our state institution the patients go home under medication and it now is sent from the office of the state institution to the Board of Health in the County wherein the patient resides and they send the medicine to the County Health Department to hand it out.

Then under the private treatment of veterans, under the Veterans Administration, I personally have about 4 or 5 right at the present time that are taking medication and when they are called to Winston-Salem for an examination and so forth, they are given instructions to come back home and notify the Winston-Salem office when they're out of medicine and they'll send it to them.

I think all of that should be looked into by the committee.

PRESIDENT RHODES: It is very obvious that this has many ramifications, I'm sure.

Any other comments?

DR. MURPHY: Rehabilitation is doing the same thing. Our counselor at home is ordering wholesale drugs and then handing them out to patients.

PRESIDENT RHODES: Any further discussion?

Dr. Kernodle.

DR. KERNODLE: Mr. President, since we're talking about this it's a very vital issue and I am not sure how it should be handled but Dr. Koomen is here, and this is the use of Envoid through the Health Department.

What is the feeling of the State Medical Society of the manner in which this is being handled? There are more and more information requests about it and more and more health departments are taking it up as a part of their program. Shall we put that through the drug stores or shall we recommend it be handled through the health department?

PRESIDENT RHODES: Do you have any comments, Jake, on that point?

DR. KOOMEN: Ed, as you point out, the question has very wide ramifications. I can't speak for the Department of Health on the use of its drugs but I do know that there are departments doing this, though by no means all. It has been a subject of considerable discussion between the pharmacy group and the state health group in years past, not only through the government agencies but, of course, private organizations too. There are a variety of arrangements in the state between pharmacists and voluntary organizations for the purchase of drugs.

Of course, we have on the one hand the very real need to support the pharmacists which is something we must do as our professional colleagues, and on the other hand, of course, the very large number of patients who are healed at public expense, yours and mine, through our magnificent tuberculosis sanitarium and rehabilitation centers.

As was pointed out the mental hospital system is where these practices are often resorted to as the least expensive means for these people.

Now, in the matter of mental health I am not saying, of course, that all goes well, but there are a number of physicians, perhaps many in the state, and that includes health directors, who are not helpful in the followup of mental health problems. Some of them have come to this sort of thing as a medium whereby care is expedited. It is a field of very wide ramifications involving many government agencies, many private organizations, many pharmacists and many physicians and I think it

will be difficult to face this issue squarely in just a few minutes of discussion.

PRESIDENT RHODES: Thank you.

Ed, did you have further comment?

DR. BEDDINGFIELD: Just this, the State Board of Pharmacy Examiners of the State of Florida recently tried to get a restraining order restraining the various county health departments in that state from dispensing drugs, saying that they were in violation of the Pharmacy Act, you see. The unusual case of one state agency going to court against another.

The Attorney General of that State held that the Pharmacy Law did not apply to governmental agencies and that they could continue to dispense these.

PRESIDENT RHODES: That's an interesting comment.

This is a real important subject. Is there further discussion?

If not, so many as favor the motion make it known by saying "aye."

The motion was carried.

We will move along to Memorandum of North Carolina Democratic Platform regarding Mental Health Plank - 1964.

Is this a partisan issue?

EXECUTIVE DIRECTOR BARNES: This is a report of meeting of the Legislative Committee of the North Carolina Mental Health Association. It encompasses general hospital services, services for children, services for alcoholism, diagnostic and evaluation services, increased research, rehabilitation services and other suggested areas for inclusion in the mental health plank.

DR. MURPHY: Are they requesting advice on this?

EXECUTIVE DIRECTOR BARNES: No.

PRESIDENT RHODES: They have just submitted it for our information. That's my understanding, it is submitted for our information.

DR. BEDDINGFIELD: I move it be received for information.

DR. SAMS: Second the motion.

PRESIDENT RHODES: Dr. Sams seconds the motion.

So many as favor the motion to receive this report for information will make it known by saying "aye."

The motion carried.

We can refer it to the Legislative Committee.

I will rule that this report be circulated to the Council.

(g) Gaston County certification of membership classification unauthorized by Constitution and By-Laws.

EXECUTIVE DIRECTOR BARNES: Mr. President, on March the 11th, 1964 we received from the Secretary of the Gaston County Medical Society an application for active membership of one Thomas Harold Williston, M. D., of Gastonia, North Carolina, in which the application indicates the racial entity of Negro.

DR. SAMS: Mr. President, I move that this information be given to the Councilor from that district, Dr. Bivens, and let him investigate it thoroughly and report to us at our fall meeting.

PRESIDENT RHODES: Is there a second to Dr. Sam's motion?

DR. KERNODLE: Mr. President, I would like to make a substitute motion that Dr. Bivens be empowered to contact the President of the Gaston County Medical Society today and bring back to our meeting at a later hour the action of their Society in regards to whether this man is a full member or not, as of this moment.

PRESIDENT RHODES: You will accept the substitute?

DR. SAMS: Yes.

PRESIDENT RHODES: The motion is made and seconded that Dr. Bivens be empowered to contact the Gaston County Medical Society President today and to bring back a report of their action in relation to this.

PRESIDENT RHODES: So many as favor the motion, let it be known by saying "aye."

(A chorus of "ayes.")

Opposed "no."

The motion carried.

Consider letter to Secretary Styron in reference to Rockingham Surgical Society and press treatment of its announcements.

Dr. Styron, would you give us a summary on this?

SECRETARY STYRON: I received a letter from Dr. Roy Truslow of Reidsville, North Carolina, which states as follows:

"The enclosed article appeared recently in at least five newspapers in two counties of North Carolina. A written complaint has been sent to our Rockingham County Medical Society that this article violates the American Medical Association's principle of ethics" and it gives the citation.

Dr. Harry Johnson has some information in this regard. I think in fact this problem has been solved locally. The reason I read this correspondence to you is because this may come up again and it would give us some basis of discussion.

Dr. Johnson indicated to me earlier that he does have some remarks to make in this area.

PRESIDENT RHODES: Dr. Johnson.

DR. HARRY JOHNSON: I spent a little time discussing the (press) matter with five or six members of the Rockingham County Medical Society and I got a fairly clear picture, I think, of both sides and discussed it with them.

I did not think that the last paragraph was in keeping with the usual standard of medical ethics, but, frankly, I think the county society is the body which should be held responsible or the ones

who should call upon us for action.

PRESIDENT RHODES: You have heard the recommendation of the Councilor for the District. What shall we do with this report?

DR. WILLIAM F. HOLLISTER: I move we accept the report as information.

PRESIDENT RHODES: Dr. Hollister has moved the acceptance of the report as information.

DR. DEWEY H. BRIDGER: Second.

PRESIDENT RHODES: Dr. Bridger seconds.

Is there any further discussion?

SECRETARY STYRON: Just this, I believe that Dr. Truslow should have a letter in answer to the action of the Council.

PRESIDENT RHODES: Dr. Johnson, we will request that you do confer with Dr. Truslow and explain the action of the Council. The Council has not voted on this motion yet.

Do I hear further discussion?

(No response.)

If not, so many as favor the motion will make it known by saying "aye."

(A chorus of "ayes.")

Opposed "no."

(No response.)

The motion carried.

Let us move along now to Consider the Spruce Pine Community Hospital controversy. This has been brought before the Council on two previous occasions and I will simply bring you up-to-date before I call on the Councilor to this point, and that is that the only communication I have had about this matter since the last meeting of the Council was from Dr. William Burch who had had an interest in it and with whom I had had some correspondence about it dated February the 2nd 1964.

In this letter he indicates that Dr. Horner had been reappointed to the staff of the Spruce Pine Community Hospital and that the matter presumably had been resolved.

I would like to ask Dr. Sams if he has any comment he would like to make about this affair in Spruce Pine?

DR. SAMS: Mr. President, the only information I have had about it came from Dr. Burch and through Dr. Sargent in Yancey County at Burnsville which is an adjoining town and county to Spruce Pine.

I think the thing is solved and I think that the Community Hospital is going along all right.

Do I hear any motion that we accept the report in relation to the Spruce Pine case for information?

DR. RAIFORD: I so move.

PRESIDENT RHODES: Dr. Raiford has made the motion. Is there a second?

DR. BRINN: Second.

Upon being put the motion carried.

PRESIDENT RHODES: Letter communication from President of Craven County Medical Society re AMA Specialty Journals. Jim.

EXECUTIVE DIRECTOR BARNES: Mr. President and members of the Council, at the turn of the year the American Medical Association had some problems with reference to relationship with postal authorities on mailing copies of the Specialty Journals to members to whom it would accrue.

There had to be apparently an individual specification of address and the request for the journals. As a consequence of that, we devised a letter which was sent out on the 7th day of January to every member of the State Medical Society in which we cited the specialty journals that were available and stated that unless we had a communication from the member prior to January 31st we would assume that he should be allocated the specialty journal pertinent to his practice classification in the State Roster, and there was a card for him to check the acceptance of that or another choice or a choice not to have any specialty journal which some members have from time to time expressed.

As a consequence of that on January the 11th we got this letter from Dr. Dale T. Millns of Craven County in New Bern, North Carolina:

"Dear Mr. Barnes: I am enclosing with this letter the reply card regarding specialty journals published by the AMA. I hope you will transmit this letter to the proper individuals in order that I may register my protest. The inclusion of the specialty journal as part of my AMA dues has long rankled me. The journal of the American Medical Association serves a definite function and I am glad to have a subscription as part of my annual dues. However, it has long been my feeling that the dues to the American Medical Association are too high.

"Apparently several years ago the AMA found itself with too much money and rather than reducing the dues they instituted this plan of requiring each member to accept one of the journals which they publish. There are plenty of good specialty journals available to every practitioner and there is no demonstrated need for the AMA to indulge in the publication of these journals. I would much prefer that my dues be reduced rather than to accept one of these journals. The quality of these journals is generally poorer than those available elsewhere.

"Throughout the years since this practice was instituted I have indicated various specialty journals since there are none available in urology. Among those which I have received are internal medicine, general psychiatry and surgery. I find none of them of value to me.

"As President of our Local Medical Society, I plan to bring this matter before the membership in order that our delegate to the State Convention

may be instructed in regard to appropriate action."

PRESIDENT RHODES: It seems to me this is a fairly isolated objection and while it may be true that there is back of it some county society action we don't have that indication, except the possibility that the delegate would be instructed.

I would like to hear a motion.

DR. HARRY JOHNSON: I move it be received for information.

DR. BENTON: Second.

PRESIDENT RHODES: It is moved by Dr. Johnson and seconded by Dr. Benton that this be received as information.

Upon being put the motion carried.

Now, we come to Special Reports. The first of these is (a) National Legislative Actions.

Ed, do you have anything further you want to say?

DR. BEDDINGFIELD: I think not. I would invite everybody who has not done so to read the editorial in this week's AMA news concerning the recent action of the United Automobile Workers and Mr. Reuther and they backtrack a whole lot and they are actually heading back toward a Murray Waggoner-Dingell Bill concept of total socialized medicine and it shows where they really stood all the time.

That's an excellent editorial and I commend it to all of you.

PRESIDENT RHODES: Do I hear a motion that we accept Ed Beddingfield's Report with approval.

DR. FRED G. PATTERSON: I so move.

DR. RAIFORD: Second.

PRESIDENT RHODES: Any further discussion? On vote the report is approved.

I am going to the Committee on Legislation, in this case State Legislation.

As most of you realize there has been a considerable amount of indecision about the implementation of the Kerr-Mills Law as enacted by the last General Assembly.

In early January it was reported that the Board of Welfare would not implement a medical assistance to the aged program but rather would expand the old age assistance program.

At the last Council meeting the Council authorized the President to request an open hearing with the Board of Welfare in an effort to get them to reconsider their decision.

That hearing was held on the 20th of March at which representatives of the County Commissioners Organization, the Hospital Association, the local Board of Welfare employees, and the Medical Society were present. Dr. Beddingfield was delegated as spokesman for the medical society and I am going to ask him now if he would like to comment on the matter of the Kerr-Mills implementation.

DR. BEDDINGFIELD: Thank you, John. Prior to the March hearings to which Dr. Rhodes referred, the Attorney General, in answer to a question that had been directed to him by the Commissioner of Welfare, submitted an opinion that the Board of Welfare was charged under the 1963 Legislation to implement an MAA plan.

At the hearing which this Society requested which was held in March the Chairman of the Board of Public Welfare indicated that he disagreed with the ruling as expressed by the Attorney General and asked to have the Attorney General re-evaluate his ruling.

As most of you know from the stories in the press, the Attorney General reaffirmed his previous ruling. There was a barrage of news releases from the Chairman of the State Board of Public Welfare indicating that the State would lose money that the job couldn't be done with the funds available and that people who are presently on welfare programs would suffer as a result of this, but after all the furor the decision remained firm that the 1963 legislature had directed this program be established in North Carolina.

It is of interest to note that the Legislative Committee had some contact throughout this with the Governor's office and had firm support from the Governor's office in this stand.

When the Board of Welfare met this past week in Raleigh they went ahead and assumed their responsibility and voted to set up an MAA plan under Kerr-Mills.

All that I knew about this was a telephone call from a newspaper reporter and stories that appeared in the press and as soon as I learned this I suggested to Dr. Rhodes through the headquarters office that he direct an inquiry toward the Welfare Commissioner to find out exactly what did happen and what action the State Board of Public Welfare had taken.

I have just a moment ago had this letter handed to me which reads:

It is from Mr. R. Eugene Brown, Commissioner of the State Department of Public Welfare.

"Dear Dr. Rhodes: As you know, the State Board of Public Welfare approved the plan to implement medical assistance to the aged, frequently referred to as MAA or Kerr-Mills, at its meeting on April 28th, 1964.

"For your information, we are attaching tabulations which show the amount of money involved for the MAA program, dental services for OAA recipients and out-patient care and prescription drugs for OAA recipients and recipients in our other two public assistance categories.

"As a basis for determining financial ability in the MAA plan, the State Board approved the budgetary method which we use for the public assistance program rather than the income level. As you will note, the plan includes a limitation of 30 days, this is 30 days hospitalization, during the 12-months period for hospitalization for all categories.

However, although it does not show on the attached sheet, the motion as approved by the State Board includes provision for making exceptions under certain circumstances. The circumstances will have to be developed at a later date.

"The time schedule for the implementation of this program is July 1st for all of these services except the drug plan. We hope that the drug program will be in operation by October 1 of this year.

"If you have questions regarding any of this material, please let us know."

My immediate reaction to this personally is that one of the things that we have claimed is an advantage of Kerr-Mills over the King-Anderson was that there was not a limitation to days of hospitalization and I expect this was incorporated maybe as a necessary budgetary control during the early days, although I hardly feel it was necessary during the 12 months period for all. It would perhaps tend to dilute our arguments also as to the effectiveness of Kerr-Mills.

Attached to this letter are a series of tabulations which include estimates as to the number of people that might be covered under MAA and might be covered under the new medical care program for the other welfare categories. These are primarily statistical and budgetary projections which we have not had any time to analyze. I think it would be a waste of time to try to read such tabulations at this time.

I would say that the Committee on Legislation and the Committee on Liaison to Welfare will certainly continue to follow this very closely. We have something, we're not sure what it is.

EXECUTIVE DIRECTOR BARNES: I would like to ask, it appears to me that less than $50,000 is going to be devoted to the rest of the biennium to dental care for MAA cases?

It was my impression that the whole $200,000 appropriation of the General Assembly for dental care was for old age assistance group and could not be allocated to the ATPD or to the ADC cases.

So I do not understand the diminishment of a $200,000 appropriation to less than $50,000 as I interpret it for that one dental service when only 12 months of the biennium from July the 1st will remain.

PRESIDENT RHODES: I might comment a little further, about how this letter came about. I think it is pertinent to the fact that Mr. R. E. Brown has, it seems to us, shown a disposition to be cooperative with the Medical Society throughout this whole affair.

I talked to him by phone on Wednesday which I believe was the day after they made this decision and requested that he give me some official statement that I could bring to this meeting and Mr. Brown appeared in my office on Friday afternoon with this letter, and I was real grateful to him that he had gone to that extra effort to get some sort of an official information statement in my hands.

I discussed this matter of the 30-day limitation. The Chairman of the Board of Welfare has apparently been very apprehensive about the possible costs of this program and has stressed a great deal the lack of adequate appropriation.

We are not entirely in agreement with him because half of the biennium has already gone.

So far as the dental program is concerned, I also discussed that with Mr. Brown and he assured me that $58,000 would be allotted to the dental program and I questioned the matter of the appropriation of $200,000 in the bill and he suggested to me that the Board had the authority to transfer funds from one category to the other.

I do not know enough about it myself to go into detail about that, but that was his indication when I questioned the matter of the differential in the amount of money provided for dental care.

DR. BEDDINGFIELD: I believe, on looking at these tabulations further my interpretation would be an appropriation of $263,000, for 1964-'65. They estimate an average annual cost per case in dental care under MAA of $65.75, making a total cost of $263,000 for the balance of this biennium, which, for the balance of this biennium, will come from the following sources:

$197,000 from the federal government, $32,000 each from the county and state, for a total of $263,000. So that sounds to me like a more realistic approach, if my interpretation is correct.

PRESIDENT RHODES: One further comment about the drug program. Representatives of the Medical Society met with representatives of the Pharmaceutical Association in Raleigh to discuss the drug program and very briefly set up certain guidelines which I might just read to you.

There are only six points:

That no specific formulary restrictions be stipulated;

That only prescription drugs be approved;

That single prescriptions be limited to a maximum of $10, except on individual consideration and specific special authorization;

That no refills be authorized;

That there be no restrictions as to generic terminology of drugs; and

That the program exclude vitamins, weight control and laxative drugs.

The group felt that certain limitations were necessary; at the same time it did not feel that the formulary idea was a good one, and; so these recommendations were made by the combined group of physicians and pharmacists to the Board of Welfare.

The drug program, as has been pointed out, will not be put into effect until October the 1st.

Is there any further discussion. Much discus-

sion ensued.

PRESIDENT RHODES: What shall we do with this report? Do I hear a motion that we approve it?

DR. KERNODLE: I move that we receive it for information.

DR. PASCHAL: Second.

Upon being put the motion carried.

PRESIDENT RHODES: Do you have any further report on any other matters, legislative-wise?

DR. BEDDINGFIELD: Just two brief ones. I can wind up all my legislation in about two minutes here.

PRESIDENT RHODES: All right, let's complete that.

DR. BEDDINGFIELD: An additional matter of interest to state legislation, in the General Assembly of 1959 and again in 1961 there was a movement for the certification and/or licensure of psychologists in this state.

Just this week I have received a covering letter and a copy of a draft of a bill that they are going to have introduced in 1965 which will be a bill to be entitled, "An Act to Create a State Board of Examiners in Psychology, To Define the Duties and Powers of That Board, To Provide For the Examination and Licensure of Psychologists, and To Provide Penalties for the Violation of This Act."

This was received from William E. Thomas, Ph. D., who is the Chairman of the Committee on Ethics, Legislation and Professional Practice of the North Carolina Psychological Association. He brings their proposed action to the attention of the Medical Society, invites our comment, says that his committee would welcome an opportunity to meet with representatives of our Legislative Committee to clarify provisions of the bill and to discuss aspects of it which are of mutual concern.

I have acknowledged Dr. Thomas's letter and thanked him for his courtesy in allowing us to have a look at the bill this far ahead of time, told him that this week marked the end of our Society year and that we would have a changing of the guard, that I would see that the letter would be brought to the attention of the new administration and that they would be in touch with him.

Traditionally, of course, we have opposed such certification and licensure of psychologists because it is difficult to control what psychologists do and we think that there are many areas where psychologists are engaging in what we would conceive of as the practice of medicine, so this will just go into the new Legislative Committee's agenda for action soon.

The other matter is this. We have a letter from Major Speed from the State Highway Patrol bringing to our attention a communication that he has had from the Motor Carriers Association here in North Carolina. The truck drivers have become aware that the South Carolina State Assembly which has just adjourned has enacted a good samaritan law and apparently the truck drivers are very much interested in having a good samaritan law. They are reluctant to stop and give help help even as are physicians said to be sometimes, so the truck drivers' group through the office of the Highway Patrol has offered to go along with us in endorsing or supporting or espousing a good samaritan law in the 1965 General Assembly.

I would think that this too would be deferred to the Committee on Legislation since they have some time available.

As a matter of policy, we have watched with interest the discussions in the General Assembly on the good samaritan law. We have never been among the original developers of such bills in the legislature although we have certainly encouraged it among the representatives in the General Assembly, and I think it would have been enacted in the last General Assembly except for a little difficulty in partisan politics.

PRESIDENT RHODES: Do I hear a motion that we accept this part of the report of the Legislative Chairman?

DR. RAIFORD: I so move.

The motion was seconded and, upon vote, carried.

PRESIDENT RHODES: We go back now to Actions and Developments in Poliomyelitis Campaigns.

Very briefly I would like to report that as you will recall the final decision was that these campaigns should be conducted on a county option basis. Some 80 counties have either initiated or have completed a campaign and we are informed that at least 12 additional counties, possibly 13 counties plan a campaign in the fall which will almost completely cover the state.

Some 2,700,000 people have been involved in this immunization program which is a pretty good percentage of our population and even in those counties where campaigns have not been held, generally an isolated county surrounded by others that are engaging in the campaign, there has been a good bit of crossing of county lins so that there has been some cross immunization.

This has been a big undertaking and any one of you who has been engaged in the program will know and will realize and will recognize that it has been a big undertaking. It has met the cooperative effort of many different categories of people in the community.

It has not however been without certain anxious moments and I am going to ask Dr. Koomen if he will give us now a report of some of the things that have created some anxiety on our part.

Dr. Koomen, will you report for us?

DR. KOOMEN: As you know, last year, 1963, we registered the very best poliomyelitis experience we have had in North Carolina, and indeed the

best in the United States ever had. For the United States as a whole there were only 400 proven cases, which was half of the previous year's total, which also was the best up to that time.

In North Carolina only 7 cases were reported and of those 7 only 3 were paralytic and one died. This, we felt, meant that we have a basis, through the use of Sabin and these other medicines that had been used through the preceding years, for a hope of ending the year 1964 with the take-up of oral-poliomyelitis campaigns by some 80 counties and an additional 21 to follow in the fall, which indeed blankets the state.

As Dr. Rhodes pointed out, some 2.7 million children have already become involved in this program.

The things that have raised questions are these. Since the beginning of this program some 8 or 9 cases of neurological diseases of one kind or another have come to our various attentions, yours and ours. All together, in one way or another, these have been established as brain tumor, and a variety of other diseases have crept in and we have come down to some criticism of which vaccine was used in which case there is considerable cause for following up our investigation.

One of these is a 16 year old boy in the Western part of the State having received first type one and then subsequently type three oral poliomyelitis vaccines. Some six days after he received the type three vaccine he developed a paralytic disease and for which he was hospitalized in Asheville.

The current thinking about this boy who is recovering is that this is not poliomyelitis but this is Guillain-Barre disease and largely the diagnosis is dependent on the fact no cells were found in the spinal fluid on the initial tap, and a relatively high protein level.

This is then a case of relatively weak support for association between vaccine and disease.

The others were all hospitalized in Durham. There were two 43-year-old men who had never received Salk immunization.

I might point out the boy I discussed in the Western part of the State received some five doses of Salk vaccine.

These two 43-year-old men both received vaccine in the campaign in that part of the state, trivalent vaccine. In the case of one, some week later he began to develop a paralytic disease most extensive in his lower limbs and some in his upper limbs. This man was making a satisfactory recovery for some period of time but recently has rather stabilized and perhaps he even lost some ground.

In the rather critical tests as to whether this was polio or Guillain-Barre disease, a great deal of reliance was laid upon nerve conduction time. This man had an abnormal nerve conduction time which would make one think that this is not poliomyelitis.

However, in the background is the fact that this man had a history of alcoholism and this, as you know, also disturbs nerve conduction time, so that a number of us thought initially that perhaps this was not poliomyelitis. His reasonably satisfactory progress turned the tide somewhat and a number of observers now consider this man may have had clinical poliomyelitis.

The other 43-year-old man who had not received the Salk vaccine also received trivalent vaccine on March 1 and approximately two weeks later began to develop a pain in the back and legs and to go into very extensive paralysis. In the days and weeks that followed he subsequently, first, required respirator care, went into coma and died. He was seen by several physicians and two representatives of the CDC who came at the request of the State Board of Health. I should point out that Dr. John Rhodes has been involved in this situation from day to day. We have had very close telephone and personal communications among all of us who have been interested in this picture.

The case of this man, not only clinically, all who observed him agree, but pathologically there is really no solid scientific grounds on which we can decide what the basis for this man's illness was. In the case of this man we were hopeful of isolating the virus in the spinal cord with the idea it perhaps might provide clues as to whether we were dealing with wild strain viruses or vaccines.

From this man's stool his type one virus had been isolated, but, as I say, there is no really solid ground for a determination of the cause of this man's illness. If we isolate a virus which shows itself as a wild strain virus we will not know whether this was naturally occurring disease or whether this was a reversion process. To date no virus has been isolated in this man's spinal cord. Indeed, I think we are almost convinced that it is not very likely that it will.

His illness began in mid-March. He did not die until the 8th of April, and in some of these cases at least the classical and clinical picture although viruses are likely in the stool sometimes the stools are sterile.

Insofar as the usual diagnostic virus disease, this has been described as a burning up of the virus described in these two 43-year-old men who came down with neuroparalytic disease, one of whom died. The other, as I said, is now making satisfactory progress. There are an additional number of observers who feel that perhaps this also is poliomyelitis.

Coming into this (statewide) was a young child, a 4-year-old girl, who received some six doses of Salk vaccine who also had paralytic disease. Again the number of cells in the spinal fluid was extremely low and the protein up somewhat and the opinion of most of those who saw her was that this was Gullian-Barre disease.

Your committee then has considered some four cases one of which all agree was poliomyelitis and established later by the pathological picture, one of whom may be. There are two adults then coming into this picture and weighing gravely upon our consideration is the fact that we have a case of poliomyelitis established by virus isolation out at Plymouth, North Carolina, with this illness occurring before a virus was used in the state generally would make us feel, based on our past experience, that this is only the reflection of a widespread circulation, whereas the type one virus was isolated from this child, and the child is making satisfactory progress. As you know, in the case of clinical poliomyelitis coming to your attention the usual experience has been that somewhere in between 100 and 1,000 naturally occurring infections are going on and indeed this would have been the sort of thing that would have started us thinking about a polio mass campaign.

Your Committee was faced with the decision as to what to do in this setup. We had the advice of two visiting epidemiologists familiar with the communicable disease consultations with the manufacturers to list not only what lot numbers were being used, what the experience had been and furthermore with daily consultation among those of us immediately concerned. Then Dr. Rhodes brought together a small group, including the chairman of the committee, for a preliminary discussion. The full committee met in Durham.

It was the feeling, after scientific evaluation of all of the material at hand the opinions from the neuropathologists involved and so on that we would feel it reasonable to proceed with the campaign we originally outlined. That has been done.

I might say that the immunization of so many North Carolinians, more than 2.7 million, more than 600,000 using trivalent vaccine — many, of course, have not received the second dose, type three — is indeed an enormous progress and we can see in the future tremendous protection against this disease for the United States as a whole and it would seem again we are headed for an even better year than last for up to this point only half as many cases of polio have been reported as were reported at the same time last year.

There is never anything quiet for long in this highly controversial field and of course the Public Health Service is busy looking at our data and those from elsewhere trying to determine once again levels of immunization throughout the United States and re-evaluate as it deos constantly the vaccines in use and we of course have not yet heard the very last word on the use of poliomyelitis vaccine.

Dr. Rhodes has made the other points which you have heard and which are from my standpoint the net result of our experience.

I was asked to comment on the matter and give you a summary. In general the summary is that there is wide circulation and there are somewhat more than 50 types of viruses that we already know about. We feel this immunization should not be done in summer, in part because poliomyelitis virus may be blocked out by the presence of the interim virus, and partly because we have cases of naturally-occurring virus disease, and it becomes increasingly difficult to sort these out.

In the main then, the epidemiologists and clinical workers on infectious disease are opposed to the use of live virus vaccine in summer, except that, of course, if there is an outbreak of poliomyelitis, especially if it can be established that this is a single type, then this would be cause itself for beginning a community and perhaps areawide campaign. That was done last year in Virginia and Philadelphia, as you know.

In North Carolina, we are, as you know, a state unique in poliomyelitis and while our season begins relatively early and goes to a later time — in part this is supported by rather unique geography — in our coastal area the season is early whereas our season for poliomyelitis in the mountains parallels more closely that of the New England States. I would feel that we should certainly not begin before, for a generalized campaign I would favor waiting until, November, if it is possible. There will be more trivalent vaccine available in autumn, it is likely also that the manufacturers of monovalent may have vaccines at the moment which they will have an opportunity to try in the coming months.

PRESIDENT RHODES: Thank you, Dr. Koomen.

Before we go to other points, I would like to bring out for information some points but first by way of explanation I would like to inform the council that Dr. Richard Kelly who is the Chairman of the Medical Society's Committee was unable to be here today because of the death of the wife of one of his partners.

Dr. Kelly has kept himself abreast of this problem and has given us guidance throughout this period.

When the Committee met in Durham following the death of this individual you have been told about the question was whether or not with 35 counties ready to go with type three vaccine on the 17th of April whether or not our action should be to put out a press release or whether we should take some other course.

There has been some discussion in the Greensboro paper about this case because the man came from Alamance County and there was a good bit of implication in the release that there might be some direct relationship between the vaccine and this man's illness.

Dr. Jack Lynch, President of the Guilford County Medical Society, had answered this very well,

very straightforwardly and we felt that that was all of the press release we needed, but we did feel that the County Society should be apprised of these facts.

Very shortly after the death of the man there were three counties that we knew of, Cabarrus, Polk and Stanly County were preparing to go ahead about mid-April or earlier, somewhat earlier than these 35 counties. So we communicated with the presidents of the county societies in these areas to give them the information and it was interesting that they had not heard about this incident.

We thought that the county societies should know about it so that if anything did occur they would not feel that we had withheld significant information. But we did decide as a committee to urge the counties to proceed with the completion of their campaigns.

We were a little anxious, as you can well realize, and we are graified as of this moment that since the 17th of April when the 35 counties went forward with the type three vaccine we have had not a single report of any illness of a suspicious nature.

DR. KOOMEN: We had a call from Charlotte asking us to follow up someone. We had very meagre information, but for me to stand here and say, yes, that we do have a request to followup a situation, but what goes into that situation we don't know yet.

We undoubtedly will look into it and probably afterward there will be a report.

It should be added that through you we have been able to keep a very careful followup on everyone on whom there has been an implication. We were much pleased to followup those who have implications to learn at the beginning of something which may get into the rumor and really difficult stage.

We would much rather hear at the beginning of some question so that it can be properly treated rather than later on when the issue has become much more complicated. We have been privileged in each of these instances to have been informed fairly early.

PRESIDENT RHODES: Dr. Kernodle.

DR. KERNODLE: I want first to commend Dr. Koomen and Dr. Rhodes for the manner in which they have handled this.

Secondly, I would like to ask the question. There was some deferment among youngsters in our county on taking the second dose last Sunday because of an epidemic of measles, mumps and so forth. The pediatricians and general practitioners stopped them at this time. What do you think in regard to this recommendation?

DR. KOOMEN: It is very hard to say. On theoretical grounds the American Academy of Pediatrics felt it wise not to give knowingly two live virus vaccines which might have neuropathogenic potential and mixing in particular, of course, small pox and measles, with live virus vaccine of poliomyelitis with the idea that a month should elapse between any of these naturally-occurring diseases.

It has been our feeling insofar as German measles are concerned of which we have an epidemic and we have had an upswing of the regular measles as well, that this situation becomes extremely difficult. From my personal standpoint I weigh very lightly the matter of German measles complications. This disease is extremely rare. Ordinarily, in youngsters that might have been in the incubation period when they came through out vaccination, we let pass. It is not a very highly communicable disease anyway, unfortunately perhaps, and immunity is carried on to later life.

As for mumps, we did have a case referred to us which subsequently developed as transverse myelitis. Here you have one other situation where it went into paratitis because you don't always know. This is the last you see of the disease until paralysis may have developed. In the case of measles, too, we have this, where in a naturally-occurring disase, the potential of death is considerably more than we thought.

It is hard there to get a reasonable answer, too, especially when the picture has been partly clouded as indeed it must be by the use of gamma globulin.

What we would like, and the ideal again of course, is to have a month elapse between the last vestige of these diseases in the community, but there will probably need to be some reasonable compromise because this will put us too late in the summertime. Ordinarily clearing measles from a community may take a very long time but I would like to see the decline of cases again before one takes up an active poliomyelitis campaign. A month would be ideal. It may have to be less.

PRESIDENT RHODES: Do you have any further comment?

Do I hear a motion we accept this poliomyelitis report with approval?

DR. KERNODLE: I so move.

PRESIDENT RHODES: A second?

DR. WILLIAMS: Second.

Upon being put the motion carried.

PRESIDENT RHODES: Suppose we take this report and then adjourn for lunch.

Report of the Committee on Constitution and By-laws, Dr. Roscoe McMillan. I believe Mr. Anderson is going to bring this report to us. (Mr. Anderson reviewed the report.)

(See House of Delegates Proceedings, pp. — to —, Executive Council Report by President John Rhodes.)

MR. ANDERSON: All of the other proposals have been approved by the Council at the previous meeting.

PRESIDENT RHODES: What shall we do with the Report of the Committee on Constitution and By-Laws?

DR. SAMS: I move that it be accepted.

DR. GARRISON: Second.

On being put the motion carried.

PRESIDENT RHODES: We will adjourn for lunch.

(The meeting recessed at one twenty-five o'clock, p.m.)

SATURDAY AFTERNOON SESSION
May 2, 1964

The Executive Council Meeting reconvened at two forty o'clock p.m., President Rhodes presiding.

PRESIDENT RHODES: We will go back now to a Report of the Actions of the Editorial Board and I Will ask Dr. William Nicholson if he will give us that report.

DR. WILLIAM McN. NICHOLSON: Dr. Rhodes and members of the Council, I am indeed grateful to you for allowing me to appear before you to give this report. It is a great deal of sadness that I have to be here to give you this. In previous years this report has been made to you as the Council by our dear friend Wingate Johnson who is no longer with us.

In regard to Wingate, our first order of business last evening was to agree that on the masthead of the editorial page of the Journal we would have printed in each Journal until that time when it would be rescinded by further action the name of Wingate M. Johnson, First Editor, from the date of his inception as Editor until 1963.

The next order of business and the next thing that I would like to report to you was the fact that we as the Editorial Board unanimously elected Dr. Robert W. Prichard of Bowman Gray Medical School, Winston-Salem, as Editor. In fact, as you know, he has been acting Editor for the period since Dr. Johnson's death. Before that time he was Associate Editor.

I would like to give you just a few words about Dr. Prichard. He was born in 1923 in New Jersey in Jersey, he has two children. His military service was in the Army in 1944 and 1945 with the U. S. Public Health Service in Thailand.

He did not get his baccalaureate degree but his M.D. was from George Washington University. He interned at Gallinger in Washington, he was a fellow in pathology at Boston at Brigham and the Deaconess, resident in pathology in Pennsylvania Hospital, Philadelphia.

He went to Bowman Gray in 1951 and has gone through the various grades to hold the title now of Professor of Pathology.

He is a member of the appropriate organizations and is a diplomate of the American Board of Pathology.

He has published something like 35 papers on various pathological subjects as well as editorial and book reviews. He is indeed a most literate and articulate individual.

Those of us who know him and have worked with him during the past few months are indeed grateful that he would accept the editorship of our Journal.

The next order of business is the nomination of two members of the Board whose term expires as of this meeting of the Society.

We recommend Dr. Raiford to succeed himself. As you know, he filled the unexpired term of Dr. Westbrook Murphy.

Dr. Ernest W. Furgurson of Plymouth was also recommended and these names will be placed before the General Session on Wednesday.

There was one vacancy that was created by the death of Wingate Johnson and we will place in nomination for election on Wednesday the name of our present President, Dr. John Rhodes.

We think that the Board will be greatly strengthened by his presence on the Board.

Next we discussed at some length the expense of the publications, and after all that does concern our Committee on Publications. This is a letter from Dr. Reeves, President Durham-Orange County Medical Society to the Medical Societies of Wake, Forsyth, Guilford, Mecklenburg County in which he breaks down the $60 dues that we pay in each year.

This is broken down, for those of you who do not know about it, I will read it:

Executive Director and office $16.40; North Carolina Medical Journal $17.40; Committee Expenses $5.80; Public Relations $7.20; Annual Sessions $5.50; Miscellaneous $4.70; and Extra Function, largely AMA Meeting Expenses $1.20. Source, April 1963 transactions.

I shall not concern myself as that is not any of my business, except concerning the Medical Journal of $17.40, and I assure you that I have not been able to find where and how this figure was arrived at in the publications.

I was furnished this by Mr. Barnes. The total budget for the Journal was $61,360. The roster and Journal sales $1,684. Author cuts was $222.83. Local advertising $8,630. National advertising $30,256. Subscription for dues-paying members at $5 was $15,165. Making a total of $55,959 or expenditures over income was $5,391.13 or a loss to the individual member of $1.78.

Of course, that would be $1.78 plus $5 or total of $6.78, the cost of the Journal to each paying member, and I wanted to present that to you as a fact that the publications are not $17.40.

When I say publications, gentlemen, I would like to clarify that. Publications — we are the Publications Committee, of which I am Chairman and that includes the Journal, the roster and the procedures.

The Public Relations Bulletin is not included in that. So we think we have got a bargain package of the Journal and the roster and the procedures for $6.78.

The proceedings, by the way, as was pointed out by Mr. Barnes, was a total cost of $9,000, which was one-seventh of the total cost of the Journal publications.

We went into considerable discussion of the continuation of the publication of the procedures. We turned that over to you for further discussion to continue with the procedures of modification or anything else.

I think that covers my report. Thank you, Doctor.

PRESIDENT RHODES: Thank you, Dr. Nicholson.

You have heard Dr. Nicholson's report for the Editorial Board. I want to thank him for this very detailed and comprehensive report which covered some of the points that have been in question and I will open the floor now for any discussion of this report.

Do I hear a motion that we approve the report?

DR. PATTERSON: I make the motion we approve this report.

DR. GARRISON: Second.

DR. BEDDINGFIELD: Mr. President, along this line I would like to ask this question. In previous Council Meetings we have been alerted to the fall-off in revenue from advertising, particularly national advertising in the Journal. I wonder if that has levelled off or if it has continued to decline or if it is better?

PRESIDENT RHODES: There is certainly a very definite decline because, as you notice, the figure here was $30,000 for national advertising and that is a drop from a peak of about $46.000. so there has been a remarkable decline and that was one of the factors that led the Committee on Re-Evaluation last year to recommend an increase in dues.

I would ask Mr. Barnes if he would like to comment about the present status of national advertising.

EXECUTIVE DIRECTOR BARNES: Of course, the accrued loss of advertising in the North Carolina Medical Journal over the peak of late 1960 is something like 58 per cent. Now, that, I am able to report, is characteristic of the 34 state medical journals in the country. More or less all of the journals have had about the same experience with the loss of advertising accruing through the operation of the State Medical Journal Advertising Bureau operating in Chicago.

Since January the 1st there has been each month some decline in advertising. We are told by some of the people in high-up pharmaceutical manufacturing circles that there are two trends:

One is that advertisers are increasingly buying space in what is known as controlled circulation journals. They are the give-away books that you get and they say they have no proof of the readership of those publications but that each time they place ads in these controlled circulation journals, like World Medical News and M.D. and so forth, that they do a simultaneous mailing piece to the doctors of the country and that they sense a result in increased sales.

Now, how long that is going to hold up and the medical profession is going to be fooled by it and advertisers fooled by it, I don't know. I suspect that that doesn't trigger the actual consumption of products that much.

Dr. Austin Smith senses that this depression in advertising is due to the effect of the investigations efforts of the F.D.A. which stifle research in drug of the Kefauver Committee and the continuing production and he feels that many of these blocks are going to be ironed out within the next 18 months or two years and that there will be, then, a flush of research in drugs and that this advertisement will come back and he doesn't worry about it.

Some two months ago I was in Chicago and ran into Mr. Joe Stetler who was former Chief Counsel for the AMA and engaged him in conversation about our dilemma and inquired if he knew the reasons why the National Pharmaceutical Manufacturing group (he now being Chief Counsel of PMA) were placing the emphasis on advertising in controlled circulation journals and why had they in some sense boycotted the state medical journals?

He was not aware of it and he said he thinks that the boards of directors of the corporations that are running these production sources are not aware of it either, and that it was a passing enthusiasm for sales managership within the corporations and that if somebody would make a move to reveal the true situation to the staff of the PMA he thought that they could have some influence on the advertising programs of these national corporations.

With the permission of the Editorial Board I have queried all of the managers in the southeastern states and they are quite willing to join me and Dr. Prichard and other editors and managers in going to Washington to talk to Dr. Smith and to Mr. Stetler about this and we plan to do so.

One other thing that I can report is that in the Bureau itself in Chicago there has been some growing concern about the capacity of the directorship of it and just last week we learned somewhat inadvertently that there was some consideration of a move to change that situation.

The Board of Directors of the State Medical Journal Advertising Bureau is to have a meeting in San Francisco in June and it is thought that a new director is going to be gotten for the depart-

ment.

On the local advertising, we have made right good strides here in North Carolina and a few other states have. Maryland in particular has done better than we have, but outside of that I would say we have done about as good as anybody has done and we have on a program right now that is yielding some summer contracts and we hope that we can do a little bit better job this year on local advertising than we have done in the past.

Maybe the picture is dark at the moment but it might get better.

PRESIDENT RHODES: Thank you, Jim.

Any other questions?

DR. BRINN: Mr. President, I was just discussing with Dr. Patterson over here this communication from Dr. Reeves was not an action of the County Medical Society Group, it was just his personal communication, I gather, and since some of us don't know exactly what he was trying to say, would you alert us?

EXECUTIVE DIRECTOR BARNES: Actually, as I read this memorandum, this is the first time I have seen it, I asked him for a copy of it as he was delivering it here — (Dr. Nicholson had departed the meeting) — I had heard that some county medical society had circulated a comparative set of figures about the cost of the Journal and that it reputedly had cost the individual members $17, and as a result of that, I asked our auditor who was making the quarterly audit last week to do us a summary of last year's costs and Dr. Nicholson was given that last night and he presented it here a while ago, which is a correct figure, and somewhat different, $6.78 rather than $17.00.

This communication is on Duke Medical Center stationery. It apparently is a memo to Dr. R. J. Reeves from Dr. Harvey Estes, and I interpret it as signed by Dr. Harvey Estes. Now, Dr. Harvey Estes is Secretary of the Durham-Orange County Medical Society and I don't know whether it is an action of the County Medical Society or not.

DR. PATTERSON: Dr. Nicholson had two letters, one signed by Dr. Reeves. This was no action of the County Medical Society whatsoever.

DR. BEDDINGFIELD: I think, Mr. President, you had a motion and a second to accept Dr. Nicholson's report and it hasn't been voted on yet. *I would like to offer an amendment* that it be accepted, but in the Journal this breakdown, this cost accounting figure of where the medical society membership dues go, appears in the Journal so that our entire membership may see it. I think it would clarify the problem.

PRESIDENT RHODES: You have heard Dr. Beddingfield's amendment. Do I hear a second to the amendment?

DR. BRINN: I second it.

PRESIDENT RHODES: There is an amendment to the original motion. We will vote on the amendment first.

Is there any further discussion of the amendment?

(No response.)

If not, so many as favor the amendment, make it known by saying "aye."

The motion carried.

Now, so many as favor the main motion make it known by saying "aye."

The motion carried.

PRESIDENT RHODES: Report from AMA on affiliate membership.

EXECUTIVE DIRECTOR BARNES: President Rhodes, this is a letter from Dr. Blasingame, Executive Vice President of the AMA and it is in regard to affiliate membership in the American Medical Association, and I think it has six items here that probably ought to be read.

PRESIDENT RHODES: All right.

EXECUTIVE DIRECTOR BARNES: At the last meeting of the House of Delegates in Portland, December 4, 1963, the By-Laws of the Association were changed to broaden the category of affiliate membership in the American Medical Association is now open to persons who belong to one of the following classes:

One - physicians who are members of the chartered National Medical Society of foreign countries adjacent to the United States to be approved and nominated by the Judicial Council.

Two - American physicians located in foreign countries or physicians of the United States engaged in medical missionary and similar educational and philanthropic labors to be approved and nominated by the Judicial Council.

Three - dentists who hold the degree of D.D.S. or D.M.D. who are members of the state and local dental societies to be approved and nominated by the Judicial Council.

Four - pharmacists who are active members of the American Pharmaceutical Association to be approved and nominated by the Judicial Council.

Five - teachers of medicine or of science allied to medicine who are citizens of the United States and are not eligible to membership to be approved and nominated by the Judicial Council.

Six - scientists in sciences allied to medicine who are citizens of the United States and are not eligible to membership to be approved and nominated by the Judicial Council.

The purpose of this communication is to advise the state associations and the county component units of these available affiliate classes of memberships and to encourage the nomination of individuals to the American Medical Association for that type of membership.

PRESIDENT RHODES: Thank you, Jim.

I don't believe that affects our membership in any except that it is the AMA's effort to secure nominations from every state and county societies

for this category of membership in the AMA.

That is my understanding. Is that right, Jim?

EXECUTIVE DIRECTOR BARNES: And may I point out there is no implication that this would carry any sort of standing in a state medical society or a component county medical society.

DR. KERNODLE: Are there any dues associated with this?

EXECUTIVE DIRECTOR BARNES: If so, it doesn't prescribe them.

DR. BRINN: Does that affiliate membership entitle him to all of the rights and privileges of the AMA and all its respects?

EXECUTIVE DIRECTOR BARNES: It does not. It entitles him to access to the scientific features of the programs of AMA.

DR. BRINN: But he may attend all of those.

EXECUTIVE DIRECTOR BARNES: That's right.

DR. BRINN: May he participate in any of those programs and may he present papers if he so wishes?

EXECUTIVE DIRECTOR BARNES: I presume so.

DR. BRINN: Could he enter into the discussions and carry on comment?

EXECUTIVE DIRECTOR BARNES: I would assume so.

PRESIDENT RHODES: Do you have any comment on that, Mr. Nelson.

MR. RICHARD NELSON: I'm not sure about that, because I think as far as the scientific programs anyone who is qualified in the estimation of the program people could be invited to make such a presentation. Not on their own initiative but on invitation.

Now, as to Mr. Barnes' word "access," I don't know whether this implies that in having access to the meetings this gives him the right to the floor of participation and discussion.

But there is no dues. It does give them the right to subscribe to journals but it doesn't give them any license to hold office or participate in any sense of that kind.

PRESIDENT RHODES: Do I hear a motion that we receive this for information?

DR. RAIFORD: I so move.

PRESIDENT RHODES: Second?

DR. PASCHAL: Second.

PRESIDENT RHODES: Any further discussion?

(No response.)

If not, so many as favor the motion make it known by saying "aye."

The motion carried.

The next item is a report of Executive Council to the House of Delegates and that involves the approval of the abridged edition of the minutes of the Council Meeting. Every member here has received that.

Of course there will be some addendum from this meeting.

Do I hear a motion that we approve the report of the Council to the House of Delegates?

DR. HARRY JOHNSON: I so move.

DR. SAMS: Second the motion.

Upon vote the motion carried.

PRESIDENT RHODES: *The Report of the Treasurer.*

EXECUTIVE DIRECTOR BARNES: You have in the Compilation the Auditor's Report which really is the Treasurer's Report for 1963. and I would simply point out some salient facts about the 1963 budget as we operated through the year.

There was a budget approved encompassing revenues to be anticipated to be collected of $232,605. Actually, there was $213,424.09 collected in revenues for the Society for the year.

It should be pointed out that of the budget there was $14,900 anticipated to be derived from the polio campaign, which, of course, did not materialize. There was an estimated balance on January 1 of 1963 which, of course, did not materialize, because the operation in 1962 was substantially nil so far as any balance was concerned. Then there was an imbalance in the budget as approved from the standpoint of expenditures of about $1,180.

So that the difference in the income from that budgeted was $19,080.91.

The expenditures authorized in the 1963 budget were $232,713, of which $220,954.32 was spent, leaving a saving in the expenditures authorized of $12,758.68.

Applying this against the failure to get these items of revenue, the operation came out $7,430.23 in the red.

If you consider that the $1,180 of that was an imbalance, the net would have been $6,322.23.

Considering the fact that the invested reserves earned $6,259.63, which is re-invested in the reserves, this $7,430 deficit pales to a deficit for 1963 of $900.60.

I don't know, with a budget approximately $21,000 out of balance when you begin, how you could do much better in the management of the funds for a year, and I am personally rather proud of it, and Dr. Wayne Benton can comment after I get through and Dr. Rhodes can comment.

I wanted to refer to our current situation just briefly for the year 1964. You had authorized an income budget of $250,980. Actually, we have collected through March 31 $165,757.48.

You authorized an expenditure budget of $243,035 and we have spent $47,000 of that budget, so that we have an excess of income over expenditures for 1964 as of March the 31st of $117,796.11, and I believe that we should come through 1964 in good shape.

I believe, unless there are some questions, that is the statement of the facts in the situation, and

this report of the 1963 audit is in the compilation and will be presented to the House of Delegates tomorrow afternoon.

PRESIDENT RHODES: Thank you, Jim.

I don't think that there is any question that Jim and his staff have done a marvelous job in this last year in attempting to meet the deficiencies of the budget without any obvious restriction of the activities of the Society and I think he deserves a commendation along with all of his staff for doing this fine job, because the picture was real gloomy when that budget was adopted, as you all know.

Wayne, do you have any comment?

DR. BENTON: No.

PRESIDENT RHODES: Jim, we want to thank you —

DR. BENTON: Except that I agree with you 100 per cent. The Finance Committee is real happy.

EXECUTIVE DIRECTOR BARNES: Would you say that these figures are correct so far as the Finance Committee is concerned?

DR. BENTON: Yes.

DR. KERNODLE: Mr. President, I move the acceptance of this report with commendation to the Executive Director and the Finance Committee.

(Several seconds.)

PRESIDENT RHODES: Is there any discussion of this motion?

(No response.)

If not, so many as favor the motion will let it be known by saying "aye."

The motion carried.

PRESIDENT RHODES: (*i*) *Reports of AMA appointments of the Medical Society of the State of North Carolina members to councils, commissions and committees.*

I think I might enumerate.

Dr. George Paschal is as you know a member of the Council on National Security of the AMA and member of the Committee on Disaster Medical Care.

Dr. John Robert Kernodle is a member of the Board of AMPAC.

Dr. John Reece has been reappointed as a member of the Commission on Costs of Medical Care.

Dr. Wyan Washburn is the Chairman of the Council on Rural Health.

Dr. Stewart W. Lippincott of Winston-Salem has been reappointed Chairman of the Committee on Nuclear Medicine of the American Medical Association.

Elias Faison has been reappointed as a member of the Committee on Nursing of the AMA.

Dr. Amos N. Johnson is a member of the Commission on Accreditation.

Dr. Thomas D. Kinney has been reappointed a member of the Committee on Blood of the American Medical Association.

I believe that covers these appointments. I think that is a compliment to our Society.

We want to commend these people and —

I do not know that we need any action on that.

Let's move on then to the next item, *Annual Reports of Councilors.*

The First District, Dr. Brinn.

DR. BRINN: No further report.

PRESIDENT RHODES: The Second District, Dr. Williams.

DR. WILLIAMS: No further report.

PRESIDENT RHODES: The Third District, Dr. Bridges.

DR. BRIDGES: No further report.

PRESIDENT RHODES: The Fourth District, Dr. Beddingfield.

DR. BEDDINGFIELD: Nothing further.

PRESIDENT RHODES: The Fifth District, Dr. Garrison.

DR. GARRISON: No change.

PRESIDENT RHODES: The Sixth District, Dr. Paschal.

DR. PASCHAL: No additional report.

PRESIDENT RHODES: The Seventh District, Dr. Bivens.

DR. BIVENS: No report.

PRESIDENT RHODES: The Eighth District, Dr. Johnson.

DR. HARRY JOHNSON: Nothing to report.

PRESIDENT RHODES: The Ninth District, Dr. Murphy.

DR. MURPHY: No report.

PRESIDENT RHODES: The Tenth District, Dr. Sams.

DR. SAMS: Nothing to report.

PRESIDENT RHODES: Do I hear a motion that these reports be approved as recorded in the Compilation?

DR. RAIFORD: I so move.

DR. BRINN: Second.

Upon vote the motion carried.

PRESIDENT RHODES: *Annual Report of Commissioners.*

Administration Commission, Dr. Wayne Benton.

(Discussion off the record in the absence of Mr. John Anderson.)

DR. BENTON: I move that we approve the retainer fee of $7,000 annually to Smith, Leach, Anderson and Dorsett beginning January the 1st 1964 as our legal counsel on a retainer basis.

DR. SAMS: I second the motion.

PRESIDENT RHODES: You have heard the motion seconded by Dr. Sams. Now we will have discussion, if there is any.

DR. PASCHAL: Mr. President, I along with Dr. Harry Johnson and Dr. Benton were on the Committee to find out from John what he wanted. John sent to each one of us a copy of this letter which I made a copy of and passed on to the Executive Secretary.

It is my understanding in talking with him that this $7,000 represents his inclusive overall charge rather than just a retainer and in some years his work will be less but he thought that on the basis of what he has done in the past that this would balance out over most any given two-year period.

John has provided me and he gave to me only this morning a statement regarding the legal services that he has done and that he proposes to do. I think most of us here are possibly cognizant of what he does do. Maybe we are not all aware of just how much time he does spend but I would venture to say and I think that he feels that he spends 6 or 7 hours a week on the average of consultation or with things concerning the Society.

However, I think that this is a reasonable fee and I would support the motion.

DR. KERNODLE: There is some question in my mind as to whether this is including his expenses or are they in addition to this?

What is the usual routine on that?

EXECUTIVE DIRECTOR BARNES: I would say that there has been bills sent to us for some expenses particularly where it involved out-of-state travel that may amount to $500 or $600 a year, cumulatively. Some years it is not that much, some years it is, but that's in addition to what we have been paying in professional fee.

DR. KERNODLE: That's a very important point, whether this is a statement of a retainer fee for the year which includes expenses?

EXECUTIVE DIRECTOR BARNES: I should think that where you involve him in expenses out-of-state it would not be included.

DR. BEDDINGFIELD: Or some legislative expenditures?

EXECUTIVE DIRECTOR BARNES: Yes.

DR. PASCHAL: Mr. President, I would like to further point out I believe that a number of us here are aware that Mr. Dorsett has on occasion come to some of our meetings. That was with the idea that he might relieve John in case John was not available to take care of matters that concerned us.

In a similar way Mr. Willis Smith is here today to gain some information and some understanding of the activity of this group so that he too might be able to grasp this thing and so that it can be done within the firm more effectively.

PRESIDENT RHODES: Thank you, George.

Wayne, Do you want to report for us?

DR. BENTON: He says that is the total expense; that there is only one exception to it, that if we got into a big lawsuit he might have some little extra expenses.

PRESIDENT RHODES: Now, sir, does that satisfy everybody here?

I will now — if there is no further discussion, I will ask for the question. So many as favor the action will make it known by saying "aye."

Upon vote the motion carried.

Advisory and Study Commission, Dr. Poteat.

DR. HUBERT McN. POTEAT, JR.: No further report, Mr. President.

PRESIDENT RHODES: Annual Convention Commission, Dr. Leonard Goldner. Dr. Goldner wrote me a note saying that he would have no additional report and that because of some other commitment he was not able to be here.

MRS. KING: Dr. Goldner's report is not in the Compilation.

PRESIDENT RHODES: Oh, it is not in the Compilation.

MRS. KING: We did not get any.

PRESIDENT RHODES: I am sorry. I didn't understand that.

Professional Service Commission, Dr. George Paschal.

DR. PASCHAL: Mr. Chairman, I have no further report except regarding the Physicians Committee on Nursing, and I want to relate some happenings that have occurred in recent weeks that I think the Society ought to be briefed on.

Our Physicians Committee on Nursing met March 1964 and asked members of the Higher Board of Education to meet with us. A short while after that meeting took place I had a communication from Dr. William Archer who is the Director of the State Board of Higher Education requesting that I become a member of the Advisory Committee on Nursing Education to the North Carolina Board of Higher Education.

I was asked to be on this Committee primarily, as he said, because I was available and was close to Raleigh where I could possibly meet with them. I accepted the invitation to belong and I think it would be of interest to you to know the membership of that committee.

Mrs. Edith Brocker who is Assistant Dean of Nursing at Duke University; L. C. Dowdy, President of the Agricultural and Technical College of North Carolina at Greensboro; E. V. Fox, Administrator of the Kate Bitting Reynolds Memorial Hospital; E. N. Grubbs, Director of the New Hanover Memorial Hospital; C. Horace Hamilton, who is the Professor of Rural Sociology at North Carolina State; William F. Henderson, Director of the North Carolina Medical Care Commission; Eloise R. Lewis, Professor and Director of the Continuing Education at the University of North Carolina School of Nursing; Manson Meads, Dean of the Bowman Gray School of Medicine, and the only other doctor on the committee; Mereb E. Mossman, Dean of the University of North Carolina at Greensboro; Mrs. Marie Noell, Executive Secretary of North Carolina State Nurses Association; and I. E. Ready, Director of the Division of Community Colleges, State Board of Education; Carrie M. Spurgeon, Executive Secretary, North Carolina Board of Nurses Registration and Nursing Educa-

tion; and I.

That Committee met on two occasions in preparation to making recommendations to a committee to the Board of Higher Education. The Board of Higher Education was in the process along with the North Carolina State Board of Education and the Medical Care Commission in making a survey in North Carolina to determine and have some better understanding of nursing needs.

The purpose and scope of this survey will take about one minute. This survey would deal only with the supply and demand of nurses for educational programs appropriate to their tasks. It will take into account types and kinds of nurses presently available, the numbers of nurses being educated at the various levels, the needs of the population for nursing service and the number of nurses, by type, needed in the future.

It will identify the shortages that exist, the magnitude of the job ahead if the needs for nurses in the future are to be met. Because of the immediate need for this survey and the lack of time available for a more comprehensive study, attention will be given only to the need for the education of nurses in North Carolina.

There is a possibility that a larger study of health and paramedical occupations and professions may evolve from this study of nursing. Recommendations along this line will be included in the report of the survey as indicated.

The State Board of Higher Education was fortunate in getting the services of Mr. Ray Brown, Dr. Ray Brown who was the Director of Graduate Program and Hospital Administration at Duke University, and just prior to that was one of the Vice Presidents of the University of Chicago.

Upon the basis of this survey that Dr. Brown and Dr. H. R. Boozer, who is the Assistant Director of the State Board of Higher Education, made, upon this, they went into consultation with a group of consultants on two different occasions.

Dr. Rhodes found it difficult or impossible to be at these sessions and they were going to meet on two occasions. Dr. Archer felt that it would be of an advantage to have the Medical Society represented by a man who could, or a person who could attend both sessions to follow it through. John asked me to do this and I consented and spent two days with them about three weeks apart.

You would be interested in knowing the personnel of this committee, this consultant group. Helen C. Belcher, Project Director of Nursing Education and Research, Southern Regional Educational Board from Atlanta; A. J. Brumbaugh, educational consultant from Clearwater, Florida; Charles Cardwell, the Director of the Medical College of Virginia Hospital; Mrs. Leslie Leone, Assistant to Surgeon General of the United States Public Health Service; Mrs. Margaret Sheehan, Director of Nursing, University of Chicago, Chicago, Illinois, and I represented the Medical Society.

Very briefly I would like to call your attention to what the results of this survey were, what they proposed to do.

First they recognized that there was an acute need for nurses in North Carolina as there is in other parts of the country. Immediate action was thought to be necessary because of the nursing education situation in North Carolina. The College at Charlotte had proposed to establish a baccalaureate degree program at Charlotte College for nursing education. They were appealing to the State Board of Education, or the State Board of Higher Education for permission to establish such schools.

Coincidentally with that, Wilmington College, a community college, and now a four-year college, was making a request that they be permitted to establish a two-year school for nursing which is the associate arts degree program for nursing similar to that which is now in operation at the Woman's College, University of North Carolina, Greensboro.

One of the functions of this group was to make recommendations to the Higher Board of Education that this either be approved or rejected. The Committee did approve both requests, but they went on with these things.

First, as I told you, they did recognize the inadequacy of hospitals to produce the proper number of nurses in North Carolina. They recognize that now a new type of pattern should be implemented in order to meet the needs for nursing in North Carolina. It was pointed out and all of you, I think, are familiar with the fact that only six hospital diploma schools in the state are accredited by the National League of Nursing. There are some 20 others that have nurses training programs but they are not on the accredited list.

The second thing, they thought that the education of the registered nurse should be recognized as a function of institutions of higher learning both public and private and they are going to encourage, of course, all of the existing hospital diploma schools to continue with their programs but they are going to also insist on the community colleges taking over these programs so that they can get established in them the associate arts schools, and the nurses on thees committees recognized that created two levels of nurse education: one of the associate arts degree and one of the baccalaureate degree, but they felt that this was on the way to meet the nursing needs in the state and they endorsed it and passed it on to the State Board of Higher Education.

Thirdly, and I will touch these very briefly, the primary responsibility of the education of the registered nurse who belongs to the state and local government is to provide an adequate nursing education program.

So they are willing now to take the ball and to

make it possible for these community colleges, 14 of which we already have, and I think they have applications on 17 more pending, and they will be placed in strategic areas in North Carolina where their use will be most helpful and where their students can more or less commute to the school and get their clinical work in nearby hospitals.

Fourth, that the State Board of Higher Education be charged with providing appropriate facilities and programs to produce the number of nurses needed. It was pointed out that there was in times past and still is the need for the licensed practical nurse.

All of you are familiar with the development of that program in the state and how it has been successful and how it has provided almost adequate numbers of nurses at that level.

The State Board of Education and the State Board of Higher Education are going to combine and accept joint responsibility in carrying out this program.

Then they are going to have a continuing committee on nursing education in order to carry out this joint effort.

One other thing, the one final thing that they urged on the State Board of Education and also on the hospitals in North Carolina is that of upgrading the compensation of nurses. They appealed to the hospitals and other employers of nurses, such as doctors with nurses in their own offices, to provide leadership in this program.

It is pointed out that it is mighty hard to recruit nurses for the nursing program if, after spending two, three or four years in preparation for this type of professional service they cannot get compensated any more than somebody who finishes business college in much less time.

There are a number of other things that I haven't touched upon but I did feel that you ought to know that this program is in the offing. Just what final action the State Board of Higher Education has taken on it or will take on it, I don't know. It was approved that the Charlotte College have the Baccalaureate Program and it was approved that the Woman's College, even though it is a four-year school, would have an associate arts program.

Now, in North Carolina we have the licensed practical nurse, with whom we are not concerned here in this consideration. We have the diploma nurse, the diploma school nurse, such as we have at Rex Hospital. We have the associate degree program which is in operation in Greensboro and working very effectively.

We have the four-year baccalaureate program and then finally the training beyond the degree program in education.

These people are greatly concerned, as doctors are, about this. They asked me if I thought the doctors would go along with this program. I told them that I did not feel that I was competent to speak for the medical society, but that I felt generally that the doctors would support anything if it would provide better patient care in the state.

We don't want to lose the existing diploma schools, but it is almost a certain fact, I feel, and as I pointed out to them, that in the event that this program is adopted that all of the existing diploma schools should get out of nursing education just as fast as they can. It's an expensive proposition. Most of the schools in the state, with the exception of the six, don't have adequate teaching personnel to carry out a program which will gain them recognition and accreditation.

I believe that this will go forward and I think they will do it but I thought that this Council ought to know what has taken place.

PRESIDENT RHODES: You have heard Dr. Paschal's report about this new development in nursing. What shall we do with this report?

DR. PASCHAL: I submit it for information.

DR. HARRY JOHNSON: I move we accept it.

DR. GARRISON: Second.

PRESIDENT RHODES: Is there any discussion?

I think George probably is very correct that the diploma schools are having more and more difficulty keeping in operation. Many of them are short of financial support and I know that at the Rex Hospital, for instance, they have now contracted with the State College for these girls to spend 18 months getting their basic education, basic science education at the college rather than bringing teachers into the nursing school as they have done in the past, and this is an expensive procedure.

I do know that Dr. Fred Hubbard's Committee on Nursing is very much concerned about the plight of the diploma schools and that committee has been working upon the possibility of getting state aid for the diploma schools. It's about the only area in education today that doesn't get some state support and so his committee has been giving this some consideration and are trying to work out some plan whereby possibly when the next legislature comes around, the next general assembly, that it might be possible to proceed with a request for some funds to support or undergird the diploma schools.

DR. PASCHAL: This Committee, I might say, John, discussed that phase of it, but I think they generally agreed that it wouldn't be as effective as what they proposed.

PRESIDENT RHODES: Any further discussion?

Ed.

DR. BEDDINGFIELD: I just want to make the observation on behalf of the Legislative Committee that it appears to me that this is a case where what I will term the super nurses have tried

legislatively to have the structure of the State Board of Nurse Registration and Licensure changed unsuccessfully in the legislature and we have resisted it by supporting our diploma schools and I think this is circumventing the Board change legislatively by going to the Board of Higher Education.

I think it's deplorable. I think that better education for nurses is fine, but I think there is such a thing as pricing yourself out of business and I think this may be a trend toward that direction.

PRESIDENT RHODES: Any further discussion?

EXECUTIVE DIRECTOR BARNES: Is there not some discussion, Dr. Paschal, on the part of diploma schools as they are operating now that if this envisioned program is established at the educational level in the state rather than the professional training that has characterized the diploma schools that most of those schools will fold up?

DR. PASCHAL: The State Committee does not want them to fold up. They want them to continue, but you find situations in hospitals are such that they cannot continue to carry the burden, the financial burden of these schools.

Here in Greensboro this program at the Woman's College is called a Demonstration Program and they have two years of work at Woman's College. One year of that is devoted to daily work in the hospital. When they complete their two years they are required to have a four-months internship, so to speak.

This four-month internship is something that a good many of the nurses think is not necessary. Cargill, from the Medical College of Virginia, says that these people that come right fresh out of just two years with no internship and little clinical experience take a long time to get adjusted and become effective nurses.

However, he says, in a matter of six months or a year they are equal to the ones that have baccalaureate degrees or the diploma schools.

It is proposed that with the establishment of these community colleges they will utilize such places as Cone Hospital, such places as Rex, maybe in Morganton they would use Grace Hospital and still have the community college there to back it up.

With the nurses taking on the two years to get their R.N.s it makes more nurses available and helps to answer the problem of nurse shortage.

PRESIDENT RHODES: Any further comments?

DR. KERNODLE: Mr. President, I would like to ask Dr. Paschal, what is the relationship between, or what is going to be the relationship between this group and the LPNs and the IEC schools, the Industrial Education Centers, where they are setting up LPN schools all over the state?

Are you going to have any jurisdiction or authority over that training program?

DR. PASCHAL: It is my understanding that the LPN program was to continue under the present jurisdiction of the Board of Education with the Superintendent of Public Instruction, whereas when you get beyond the high school level, which the licensed practical nurse program does not, why, then you run into the Board of Education and the Board of Higher Education.

So there will be a difference. These people are primarily concerned with the registered nurse.

DR. KERNODLE: I bring to point again, the IEC School in Burlington is now recognized to give diplomas of a technological standing, technicians and so forth, and all the other 16 are going to be in the same category soon to go past high school training, but they have a board of trustees on the local level under the jurisdiction of the local board of education.

DR. PASCHAL: It is my understanding that they will not try to use these industrial schools in this nursing training program.

PRESIDENT RHODES: That's a different problem, I think, and we will have a report on that, I think, later on.

Is there any further discussion of this program of the board of higher education?

(No response.)

If not, so many as favor the motion that we endorse it will make it known by saying "aye."

Upon vote the motion carried.

Public Relations Committee, Dr. Fleming Fuller.

DR. FULLER: Mr. President, the report in the Compilation stands, with the exception of two additions I would like to make to the report from that Committee.

Simmons Patrick's Committee Advisory to North Carolina Highway Patrol on Traffic Safety is cited. — You are familiar with the fact that the State Commission on Traffic Safety has been quite concerned over the fact that a lot of people are getting licenses to drive who because of disease and physical disability should not be driving.

They can not do too much about it and so they asked the medical profession to come with some manner in which we could help them in eliminating these people.

Simmons Patrick has met with Major Speed and other members of the Commission and other members of the Society and we have met about five times during the year. What they have done is the Highway Examining Board when in question will give a blank to this particular person in question, he will then go to the medical committee who will render an opinion and the opinion will be submitted to the Committee Advisory to North Carolina Highway Patrol on Traffic Safety and then it will, of course, go back to the Commission.

What he has finally been able to do, I think, at last count is to get about 30 groups of physicians set up throughout the state that are going to work along with this. This is the result of a lot of hard work and I think it is something that shows the splendid cooperation between our Committee Advisory to the North Carolina Highway Patrol on Traffic Safety and the Medical Society.

In particular I would like to commend Major Speed, those of you who know him realize what a wonderful job he is doing trying to work out something to help highway safety.

Next, on the associated professions, it was my privilege the 1st of March to attend a meeting in Burlington at the Holiday Inn. I was tremendously impressed with this Association for Professions Meeting. The feeling in the state is that we, the professional people, have practically no united front to bring forth, whether it is political, legislative or whatnot, we have no real organizational weight, you might say, now.

The Association for Professions started out with the Medical Society and the Engineers, the Architects and the North Carolina Veterinarians Association and since then the Pharmacists and the Dentists are coming in, the lawyers have turned us down, John, and whether our two illustrious members of the bar who are with us might do something, we don't know.

We do feel that this is a way for the professions of North Carolina to have some weight and have a real forum for discussing ideas and bringing forth some combined strength when it is needed.

We have cards here we got through our next President Elect this year. His group got through on this last meeting the permission to have individual memberships and I would like J. R. Kernodle just if he would to say a word about this.

We feel that all but that legal group are probably coming in very strongly supporting this organization of the Association of organized professions.

John, would you like to say just a word on this, if I may, sir?

PRESIDENT RHODES: Dr. Kernodle?

DR. KERNODLE: I think you are all very well acquainted I have been involved with this about two years now, the first time was February '62, at which time we went to Michigan and met in December. A year ago, the organization was chartered in North Carolina. Since then there have been about 16 states that have chartered such organizations and they are moving rapidly along and are very well adapted to the situation.

I was very much impressed with some of our members who were at this meeting in Burlington and their impressions. I think probably when I get through and Ted speaks of his reactions and that of George Gilbert, one of our Directors, I think they will speak very highly of this program.

When we started the chartering of this organization it was a problem of getting the other professions to assume an individual membership program. We felt we would do this after about a year. The year passed by the and the decision was made to go into individual memberships.

The pharmaceutical association joined our organization of the Associated Professions in March, and they are in the actual individual memberships and Mr. Smith tells me that they will have 50 per cent of their members signed up by the first of June. I told them that I would try to get a few members here at this meeting today and we would probably start a drive among the doctors soon.

The program has a lot to offer in regard to relationships and interrelationships among the professions and the people who have the same cultural and educational background that we in the medical profession have.

Earlier this morning there was a discussion about the differences and how we could consolidate the differences among the pharmacists and the other professional areas. I think this is one way that we can get the pharmacists to understand our problems and vice versa. When we get these problems out in the open it is much easier to cope with them and we don't have a lot of difficulties.

I think probably the individual membership drive is going to be started with the idea of memberships on the basis of $5 a year membership dues. We discussed this at length and decided that the first year would be from now until December the 31st, 1965 which would include your $5 membership. Likewise, many of you are famiiler with the initial start of this program. The Medical Society advanced $500 to the Association of Professions as their share along with each of the other professions.

This year they are asked to contribute or advance another $200, I think is the maximum.

John Rhodes is a member, has been a member of this and Ted Raiford is familiar with it, Fleming Fuller and Tom Thurston, they can speak to the issue. I certainly would like to see the Council join as individual members as many as possible as of today.

DR. T. S. RAIFORD: Mr. President, my personal reaction is one of very marked interest and encouragement and optimism. At this meeting in Burlington I felt that I didn't know much about it and the longer I listened the more enthusiastic I became.

When I got back home we had a board meeting of the Buncombe County Medical Society and, as John said, Dr. George Gilbert is a Director and is also a member of the board. He was quite enthusiastic about his report to us. George is a very astute urologist and he doesn't get enthused very often, and when he does people listen.

The point is that this is a spreading thing by

word of mouth and I have heard in lockerroom talk a great deal of interest expressed, and in a sense I believe it is on a good start.

PRESIDENT RHODES: Thank you, Ted.

Does anyone else have a comment?

I would only add that one of the points that Dr. Annis has made in many of his talks around the country has been that we need more intercommunication and more dependence one with the other of the various professions and this certainly is a mechanism whereby we may arrive at that sort of understanding.

This report is really in two parts. We have already endorsed the action of the Committee liaison to the Highway Patrol. We have already endorsed the action of the Traffic Safety Committee and I do not believe we need any action on that, but on the second part of this report relating to the Association of Professions there is an item of $200 entailed and we will need some action.

So, do I hear a motion?

DR. BRINN: I move we appropriate the money.

DR. RAIFORD: Second:

PRESIDENT RHODES: Dr. Brinn has made a motion that the money, the $200 be appropriated by the Medical Society to support the Association of Professions, as our share. There was a second to the motion.

Any further discussion of this item?

DR. PASCHAL: Mr. President, I would like to inquire if we have 50 per cent member participation in this, will it be necessary to continue our appropriation?

DR. KERNODLE: That is the desire, that this become self-supporting and you will not contribute a large amount.

PRESIDENT RHODES: Any further discussion?

(No response.)

If not, so many as favor the motion will make it known by saying "aye."

Upon vote the motion carried.

Now, we come to the adoption of the report as a whole. Do I hear a motion?

DR. WILLIAMS: I so move.

DR. PATTERSON: Second.

PRESIDENT RHODES: Any further discussion of the report as a whole? This is relating primarily to individual memberships?

(No response.)

If not, so many as favor the motion will make it known by saying "aye."

Upon vote the motion carried.

Negotiations Committee, Dr. Hollister.

DR. WILLIAM HOLLISTER: Mr. President, the Negotiations Committee has no further report.

PRESIDENT RHODES: The Public Service Commission.

DR. THOMAS G. THURSTON: No further report.

PRESIDENT RHODES: Now, we have to adopt the Annual Report of the Commissioners as recorded in the Compilation and as amended by actions that we have taken.

Do I hear a motion we adopt the report of the Commissioners as a whole?

DR. BEDDINGFIELD: I so move.

DR. HARRY JOHNSON: Second.

PRESIDENT RHODES: So many as favor the motion make it known by saying "aye."

Upon vote the motion carried.

Communication from North Carolina Dental Society, Dr. D. A. McLaurin and Mr. Barnes to discuss.

Dr. McLaurin.

DR. D. A. McLAURIN: For some time the School Health Committee has been quite interested in the problem of the administration of the School Health Funds in North Carolina. The dentists have perhaps been even more interested than we, and in the course of time we have had several joint meetings with them, the latest of these in March.

As a result of the joint meeting in March action was taken by the Joint Committee along these lines, that the North Carolina Dental Society and the Medical Society of the State of North Carolina request the Governor to appoint an Advisory Council on the Administration of the School Health Programs to advise on policy, rules, regulations and such other matters as may be referred to it by the State Board of Education and the State Board of Health.

Composition of said Council should be: Three dentists, three physicians, two active local school administrators, one pharmacist and three representatives of the community at large. The administrative head of the program for the State Board of Education should serve as Secretary of the Council. The State Health Officer and the Commissioner of Public Welfare should be represented either in person or by designated assistants as ex officio members of the Council.

This action is brought to you for your consideration.

Since this was forwarded to several members of this group for their consideration prior to this, there has been some further discussion, and Dr. Theodore Scurletis, with the State Board of Health, has come up with a resolution which he would like considered also.

If it is in order, I will read this and then the Council may act as they wish between the two and perhaps come up with something in between.

"Where as the School Health Program carried on by the School Health Coordinating Service for the past 15 years has not recently been subjected to careful study and evaluation and whereas there may be increased opportunities for coordinating this program with other child health services of other agencies and whereas the health of school

children is closely related to the needs of poverty stricken people and whereas the health problems of school children may be a primary cause of drop-out and whereas both state and federal governments have in recent years considerably increased attention and support in children areas of child health which were not a part of the original school health coordinating service plan,

"Therefore Be It Resolved that the Governor of North Carolina be requested to appoint a Commission for the purpose of making a careful study of the entire area of health needs in the school-age child with the objective of making recommendations to the Governor which will result in the general improvement of these services, the elimination of duplications of service and increased coordination of these services with other child health services and which will take full advantage of more recent knowledge, facilities and opportunities for health service to children of school age."

This last is read to you at the request of Dr. Frank Barnes, the Chairman of the Committee.

If it is in order, I would like to make one remark. I assisted pretty heavily in the drafting of the original document that was read to you because it was my personal feeling that we should not become an investigative agency. I cannot help but feel that those who administer these funds are honest, hard-working, dedicated citizens trying to do the best they can under the circumstances.

There are many areas which need vast improvement in the program.

I would prefer that we move along the lines of assisting rather than that we become detectives seeking to find areas of questionable conduct.

These are read, and, Mr. President, for your consideration and action.

The School Health Committee would like to see approval of one or the other, or something similar.

DR. BEDDINGFIELD: May I ask a question? How much money is involved in this thing?

DR. McLAURIN: It would be $500,000.

DR. BEDDINGFIELD: The biennium.

EXECUTIVE DIRECTOR BARNES: I believe it is $500,000 always for the biennium.

The Medical Society did, in 1949, endorse this type of program at a time when there was a joint school-health coordinating agency composed of staffs of the State Board of Health and the State Department of Public Instruction.

The federal government was moving at that time in Congress to generate a federal matching fund and the late Superintendent of Public Instruction made an appeal to the General Assembly for this supporttive appropriation and it was granted.

Then the congressional proposal fell through and was never enacted, so that this fund became available with full authority of the School Health Coordinating Unit then housed in the North Carolina State Board of Health to administer this fund for the defective, indigent school children in the state.

Over the years there has been some consultation with the Medical Society, particularly the committee headed by Dr. Jack Peele of Kinston in regard to the criteria for the certification of these children and the program has gone along each biennium. It has been a useful program, but in some measure I think the Health Department aspect of the supervision, perhaps, of this program has become less and less as it has been more and more a program oriented in the public instruction field so that the funds now I believe are actually administered on some sort of a per county grant and then a per capita grant, if I understand it correctly, Dr. Koomen, and it is expended by the local Superintendent of Schools through maybe the principals of the respective schools in his county.

I would certainly say from the history I know of the movement, that in 15 years this program does need some evaluation. Who is to do it, of course, is a question, and whether or not the Governor of the State would be intrigued with the creation of a Commission, I don't know, but I do think it ought to be looked at.

DR. BEDDINGFIELD: Is there any suggestion, Dr. McLaurin or Mr. Barnes, that in this program, as it now exists, medical decisions are being made by non-medical people?

DR. McLAURIN: That's one of the chief objections.

EXECUTIVE DIRECTOR BARNES: Particularly by the dentists. They sense the same thing.

DR. McLAURIN: I believe there is one other point that should be brought out here about this. I do not know this of my own knowledge but it comes from reasonably good authority from those who have studied and helped to administer this, that the local school administrator is permitted to expend up to $10 of this at his discretion.

EXECUTIVE DIRECTOR BARNES: Per capita.

DR. McLAURIN: And there are many cases in which it has been documented that children who have been injured are sent for treatment and the treating individual has been told, "If this is less than $10 we'll pay it out of school health funds," to save filling out the insurance forms, which I wholeheartedly agree with, except I think perhaps it is a mis-utilization of the funds.

PRESIDENT RHODES: You have heard Dr. McLaurin's report and the resolution, what shall we do with them?

DR. BEDDINGFIELD: I move that we endorse in principle the original report of the Committee, not the alternate presented by Dr. Scurletis.

DR. PATTERSON: I second.

DR. BEDDINGFIELD: We will endorse it in principle and then we can talk and see whether to ask the Governor to appoint it or try to seek it legislatively.

PRESIDENT RHODES: We've got a motion made now that we endorse the principle of the report, of the original report of the Committee, and there is a second to that motion.

Is there any discussion?

DR. McLAURIN: I would like for Dr. Koomen to speak to this.

PRESIDENT RHODES: Jake, do you have something to add to this?

DR. KOOMEN: I have nothing to add except the fact that this was once a very large yearly function of government and now it is considerably reduced in size over the years and such things, when they are tied to two agencies, as I am sure you realize, sometimes go smoothly and sometimes not, depending upon the personality involved.

This involves a great many children and a great many people, and it is very difficult to lay down a blanket decision that will be fair to all. Probably in this it would be reasonable to have the education people handle it, and obviously they have been, but perhaps some reasonable opportunity to work out the long history of this, beginning back in 1948 would show how we arrive at the present status and might be worthwhile.

I presume all of that is tied in with the recommendations.

PRESIDENT RHODES: It seems to me that would involve then an endorsement of this in principle with a recommendation for further study. If there is no further discussion, do I hear a voice on the enactment of this action?

All in favor say "aye."

Upon vote the motion carried.

In February I received a letter from Dr. McLaurin bearing on the Nursing Home Advisory Council to the State Board of Health, and I am going to ask Dr. McLaurin if he would like to comment at this time about the problem he raises there.

DR. McLAURIN: Dr. Rhodes, I think that the problem is about as clearly put as I could put it in the letter. This was dated 20 February and it immediately followed the meeting of the Nursery Home Advisory Council of the State Board of Health.

"Dear Dr. Rhodes: This letter is in reference to the Nursing Home Advisory Council to the State Board of Health and concerns the clarification of the status of this Council.

"I was appointed to the Council by the State Board of Health on the nomination of Dr. Amos Johnson and Dr. J. R. Kernodle, then President and President-Elect of the Medical Society, after the General Assembly of 1961. In the intervening two and a half years it has been my understanding that the Council was advisory to the State Board of Health. The recommendations of the Council were at all times forwarded to the Board of Health in exact fashion as approved. All members of the Council have been under the impression that the group was advisory to the State Board of Health.

"At the February 13th meeting of the Council Dr. James Donnelly in the briefing of two new members of the Council explained the status and authority of the group and made the statement that the Council was now and always had been advisory to the Nursing Home Section and not to the Board of Health proper.

"For a number of reasons, including some personal ones, this is not acceptable to me. I find this arrangement to be totally unsatisfactory because the activities of the Nursing Home Advisory Council are too important to the people of this state to be subjugated to the whims of a section chief at the State Board of Health.

"It is entirely possible that no difficulties would ever arise if the Council were left advisory to the Nursing Home Section. It is just as likely, however, that difficulties would occur because theoretically the recommendations of the Nursing Home Advisory Council would be to the Chief of the Nursing Home Section and their presentation to the full meeting of the State Board of Health would be at his discretion.

"The fact that the Chief of the Nursing Home Section has taken steps to recommend the expansion of the Council and the alternation of its representation without discussing this with the existing group leads me to think that he would, if he chose, arbitrarily ignore or dispense with any recommendations made by the Council.

"Because of these feelings I elected to make a motion that the activities of the Council be suspended pending clarification of the status from the State Board of Health. This motion was unanimously passed.

"After the meeting I was approached personally by Mr. Joseph Barnes, Mrs. Edith Chance, Dr. Gerry Rowe, and Mrs. Nan Cummings, all of whom expressed their strong support of the motion and the idea behind it.

"As stated above, these feelings are personal. It would seem appropriate, however, to ask for a statement of policy from the Executive Council of the State Medical Society.

"I have enjoyed the service on the Council and would like very much to continue, but only if the Council remains advisory to the State Board of Health. If it is your desire or that of the Executive Council, I will resign from the Council effectively immediately, or, if the situation is clarified in line with the above thoughts, will gladly continue to serve to the best of my ability."

Now, there are several reasons for this. As I say, some of it is personal and pertains to the relationship with the existing Chief of the Nursing Home Section.

I have reviewed all documents that I have pertaining to my appointment and to the minutes of

the early meetings of this organization and in all cases the statement is made that this is advisory to the State Board of Health, and at this meeting on February 13th for the first time mention was made that it was advisory to a section of the State Board of Health and not to the Board proper.

My feeling, sir, is unchanged. I am at your disposal. I will continue if you choose, or I will resign if you choose, or will discuss it in any way you see fit.

PRESIDENT RHODES: We have searched for a definite statement about the basis on which this appointment was made and apparently it was made by Dr. Amos Johnson with the concurrence of Dr. John Kernodle and we have the minutes of the initial meeting of this Council which has a paragraph which says:

"It was stated that the purpose of the meeting was for the Council to begin 'its powers and duties', A, 'to conduct and advise with the State Board of Health on matters of policy affecting the administration of the Nursing Home Program and in the development of rules, regulations and standards provided under the law.'

" 'B, to hear, consider and make recommendations concerning appeals by purveyors of these services under this program, pursuant to regulations adopted by the State Board of Health.' "

I don't believe we have in our own minutes any reference to this appointment. I believe that what probably took place was that there was a request for a representative from the Medical Society to serve on this Council and the President appointed such a representative.

DR. BEDDINGFIELD: A request from whom?

PRESIDENT RHODES: A request from the State Board of Health.

DR. BEDDINGFIELD: This Advisory group is a creation of the State Board of Health?

PRESIDENT RHODES: A creation of the State Board of Health.

I took it upon myself to discuss this with Drs. James Donnelly and Dr. Roy Norton and the pertinent point that was made was that if all of the advisory groups to the State Board of Health, to its divisions, were required to report directly to the State Board of Health, it would consume an enormous amount of time.

That is about as far as we have gotten with this discussion.

Dr. Koomen, would you have any comment to make, please, sir, about this?

DR. KOOMEN: I think part of this situation arises out of the fact that both our policy-making board to which four members are elected by the State Society and we who are staff bear the same name. In other words, we are both State Board of Health. If one were the Board and one were, let us say, the staff or the department, perhaps this question would never have arisen, but it is my belief based on conversations that we have had the original intention was that this be advisory to the staff, also called the State Board, but not advisory to the nine members of the policy-making body.

Indeed our other advisory committees are also advisory to the staff and not advisory to the policy-making body.

However, Dr. Rhodes, you and Dr. Norton and Dr. Donnelly discussed this with Dr. McLaurin as well, but I believe that is perhaps where the initial step of misunderstanding occurred.

PRESIDENT RHODES: It appeared to me in my discussion with Dr. Norton and Dr. Donnelly that their understanding was that this was an appointment to the Division and not to the Board of Health and yet in the minutes of the original meeting the words "Board of Health" are used in discussing the duties of the advisory council.

I think we would have to have some discussion about whatever policy this Council wants to take in this regards, whatever policy we want to set in regard to this appointment to the Advisory Council.

The appointment is for a three-year period. Actually, we don't have anything in our record of minutes concerning this appointment. We haven't been able to uncover anything.

What does the Council wish to do about this?

DR. BEDDINGFIELD: Mr. President, wouldn't the clarification of this rest with the nine member policy-making board of the State Board of Health?

PRESIDENT RHODES: I think it will and it is on the agenda of that group.

DR. BEDDINGFIELD: If it is clarified with them, that would resolve this question for this group, wouldn't it?

PRESIDENT RHODES: The reason it was brought here is because I received this letter and I felt that the Council should be apprised of this difficulty and it is on the agenda of the State Board of Health for Wednesday morning, I'm sure of that.

Yes, Dr. Koomen.

DR. KOOMEN: If I might interject a personal note in here, Dr. McLaurin not only here but elsewhere where he works, of course, has done a magnificent piece of work and we are most anxious that we keep him. I realize that certain problems have arisen but I hope that these can be handled in such a way that we will stay as advisor.

PRESIDENT RHODES: I might say that I have a letter from the Director of the Division requesting his reappointment.

All right, John.

DR. KERNODLE: Mr. President, I was a little in on this initial part of this and unfortunately it was all by telephone and by personal conversation with Jim Donnelly, so we do have any ground

rules as you have pointed out.

What I did want to say was this, and I wonder in their consideration if it might be worth while to consider this Advisory Council be made not to a section head, but made to a Division Head. I think maybe that would allay some of the problems at hand, because the way it is now the Advisory Committee is to one individual down at the lowest echelon, apparently, and that just isn't functional.

DR. McLAURIN: Those of us who have worked on this Council want to continue working on it. Frankly, we feel that we have done a fair job. The rules and regulations have been completely revised, they became effective as of March 15th, or some such date as that.

The thing that we want assurance of is in the event that there be conflict with whomever we report to that this conflict can be aired through the State Board of Health. This is the thing that we're after, that we're not meeting up here and our considerations and labor are in vain because this man refuses to let the recommendation go forth.

This is the reassurance that we need particularly.

EXECUTIVE DIRECTOR BARNES: To add one bit, I think, to the concern that this Advisory Council has, within this current month of April or the month just passed, we did have a communication from the Administrative person in charge of the licensure or inspection and licensure program of the State Board of Health for Nursing Homes. This man is not a doctor and in substance the point of that letter was to request of me transmission to him for consideration or for edification a record of the proceedings of the State Medical Society.

Now, I have not sent them because I am not in the habit of shopping around the proceedings of the State Medical Society. I discussed it with Dr. Rhodes and we didn't come to any particular practical solution in responding to the letter, but I think that is one bit more evidence that this Council probably really has some genuine concern for the situation and as Dr. Kernodle suggests I know that I functioned in the North Carolina State Board of Health myself for more than ten years and I know that they have many advisory committees and I know it is customary for these advisory committees to be named at the request of the division head sometimes and by the State Health Officer and then these committees may become very active and vital and then again they may be put on the shelf and seldom referred to, yet the aegis is that here is an advisory committee contributed to by representatives of the State Medical Society, and I think the proposition is a little bit more vital than that.

I believe that Dr. McLaurin and the other members, and I believe that was a unanimous point of the view on the part of that Advisory Committee, should report to doctors in the State Board of Health who head divisions or to the State Health Officer as the Secretary of the State Board of Health and not necessarily to the laymen's staff people in the State Board of Health.

If that's worth anything to you.

PRESIDENT RHODES: Could we not recommend to the Board of Health that clarification of this issue be considered with the stipulation or with the suggestion that the Advisory Committee be responsible to the director of the division of the State Board of Health?

Could we do that?

EXECUTIVE DIRECTOR BARNES: The Division of Personal Health Service.

DR. McLAURIN: That in the event of a conflict that we do have right of appeal to the full board, the policy-making body?

DR. KERNODLE: I move that we make such a recommendation and that this right of appeal be allowed all the way up the line, if necessary.

PRESIDENT RHODES: Is there a second to that motion?

DR. PASCHAL: I would second it and I would like to also suggest or add that would it not be well for Dr. McLaurin to continue and be reappointed to the Council?

PRESIDENT RHODES: I think that would be the prerogative of the new president.

Dr. Koomen, do you have discussion?

DR. KOOMEN: Yes, sir. As a point of philosophy not only applying to this but to the advisory committee, if it is a committee purely advisory, then, of course, it is a group whose opinion is sought but not necessarily to be followed. The decision is to be made by the man who asks for advice or consultation. If it is one that has the right of appeal, and I am not saying that it should not have, you then take on the aspect of a council or a board and quite different philosophically from an advisory committee.

I think this is something our own board and I as a staff member should perhaps discuss in some length.

There are many factors involved in this situation, but philosophically, taking this as an example, I think we are discussing the question of: is this an advisory group, an advisory group having one function or is it an administrative body in this field? That question was not settled in the beginning and it was complicated further by the use of the term State Board of Health which means both staff and it means the nine-member policy-making board, interpreted one way by us and another way by the advisory committee.

DR. McLAURIN: May I make just one further comment.

The original letter that came to me from the

State Board of Health over the signature of one W. Gordon Poole, Chief of the Nursing Home Section, reads in the first paragraph as follows:

"Dear Mr. McLaurin: As you know, the 1961 General Assembly enacted legislation which transferred the responsibility for licensing nursing homes from the Medical Care Commission to the State Board of Health. At is regular May meeting the Board of Health provided for the appointment of an advisory council as described in the enclosure."

Now, I don't see how any more clear-cut anything could be but at a meeting in May in 1961 the State Board of Health, the policy-making body, provided for such a group.

PRESIDENT RHODES: It seems to me that we are down to whether the council is advisory only or whether it is administrative and whether it can make decisions.

DR. KERNODLE: That's right.

PRESIDENT RHODES: That is something, it seems to me, that since the request came from the State Board of Health the State Board of Health should have to clarify for us.

Am I correct in that observation, that since the request came from the State Board of Health and the difference of opinion is whether or not this is an administrative advisory group or whether it is a purely advisory group then clarification must come from the State Board of Health.

PRESIDENT RHODES: Any further discussion?

(No response.)

So many as favor the motion will make it known by saying "aye."

Upon vote the motion carried.

This will be referred then to the State Board of Health.

That brings us now to the Annual Reports of Committees. I think I can pass over most of these. If I should pass over one where there is anyone here who has some comment to make they can stop me.

The first one is Blue Shield, and I would like to report to the Council an action or a proposed survey which comes from the National Association of Blue Shield Plans. Some of us attended a meeting on insurance, a conference on insurances at Atlanta recently and at that meeting a member of the National Blue Shield Board made some comments about this proposed survey of the Blue Shield Plans, a nationwide survey.

The purpose of this is to test the performance of the plans and it would involve the following things:

To measure the extent to which a plan meets the costs of physician care in its area;

To enable the plan to enable differences in certificates;

To enable the plan in future policy decisions and to enable the plan to compare its operations with other plans.

My understanding of this is that this would involve a questionnaire going both to the patient and to doctor. It would be a completely confidential form. The replies would go directly to Chicago and be placed on IBM cards.

Two states have thus far engaged in this as a pilot program: Alabama and Masschusetts, Alabama being an indemnity plan and Massachusetts being a service plan.

I'm sorry Dr. Bradford couldn't be here today but I have discussed this with him. He has reviewed it and I am told by the two plans in North Carolina that they would do this on a joint basis so that instead of three doctors out of 10 getting questionnaires, only one doctor out of 10 would get one.

But in discussing it with Dr. Bradford he raised three points which I think are pertinent.

One, that there has been limited experience thus far with the survey, only two states having been involved.

Two, that we are presently attempting to sponsor and promote a high option, $6,000 income level plan new within the last year which was adopted by the House of Delegates, not without considerable opposition, and that any such survey at this immediate time might jeopardize that program.

Three, he felt that this should be reviewed by the Blue Shield Committee with recommendations to the Council.

So I am going to suggest that you approve that I refer this to the Blue Shield Committee for their consideration and recommendation.

DR. RAIFORD: Mr. President, I move this matter be referred to the Blue Shield Committee and a report of their considerations requested at the September Council Meeting.

PRESIDENT RHODES: You have heard the motion. Is there a second?

DR. BEDDINGFIELD: Second.

PRESIDENT RHODES: Seconded by Dr. Beddingfield.

Any further discussion?

(No response.)

If not, so many as favor the motion will make it known by saying ."aye."

Upon vote the motion carried.

Next, the Committee on Finance, and I believe Dr. Benton has something to say.

DR. WAYNE J. BENTON: I was requested to bring this question up, and it has to do with central billing from our state headquarters office through IBM machines.

Jim, would you explain that?

EXECUTIVE DIRECTOR BARNES: Of course it has reference to the fact that historically in North Carolina the dues of state society membership and dues for AMA membership have been

collected by the Secretary and/or Treasurer of the component County Medical Society.

I presume the reason for that is that membership in advancing levels of medical organization require membership in component societies. In North Carolina we prepare invoices and submit to the Secretary about the 25th of November each year with a set of instructions with reference to the types of memberships, the dues appertaining thereto and the procedures for reporting and the reporting form to report the collection of dues and the essential matriculation data for entering the membership for new members and so forth.

About that time the county societies are electing new officers and the usual result, I would say in 50 per cent of the cases of the county component societies, is that these reports are either put in a file or are not turned over to the in-coming new secretary and officers.

We begin our march from the first of January on through the spring trying to get dues and memberships reported and processed in the state office. I believe we processed some as late as Thursday afternoon about five o'clock, and some are, I understand, to be brought here by the secretaries and treasurers in the hope of getting some of the members under the wire from the standpoint of registering as members who have paid their dues, some of them paid many months ago, but whose dues have not been reported.

There is some thought in the Society and it has been discussed that there is probably some merit in the consideration of the billing for medical society dues at the state level, setting up some system of mechanically doing it, and in that connection — I don't know that you want this brought into it now, Wayne, but some consideration of an AmPac voluntary membership to accompany or to be a content of the invoice.

Some states do the collections, both for the state and the AMA, by direct billing and some do it by billing for the county society dues also.

I think it will devolve possibly some extra effort on the headquarters office because as it is now we simply print forms and send them out blank.

DR. BENTON: Do you think it will increase the efficiency of the headquarters office?

EXECUTIVE DIRECTOR BARNES: I think it probably will from what some of the fellows tell me from the other states.

DR. BENTON: Will it make your collections better?

EXECUTIVE DIRECTOR BARNES: I think it will make for prompt payment and probably more efficient.

SECRETARY STYRON: I believe the treasurers of the county societies would welcome such a move.

EXECUTIVE DIRECTOR BARNES: Of course, I am not anxious for the additional work but there is a lot of confusion as to the dues at the present time. Now whether or not there would be some sensitivity on the part of the membership or on the part of the component societies, I don't know. They still have to collect local dues.

SECRETARY STYRON: It may be possible to make this total collection and then simply return a check to the county societies for their local dues.

EXECUTIVE DIRECTOR BARNES: They do that in Pennsylvania.

DR. BEDDINGFIELD: If you didn't do that, you would have the problem that the state office would not know who had not paid their county dues and who would be ineligible for membership in the state societies?

EXECUTIVE DIRECTOR BARNES: No. If they certified that they were in standing.

DR. BEDDINGFIELD: Yes, but you've still got to get them to send in that certification which brings you back to the same old problem, that of communicating with the secretary.

EXECUTIVE DIRECTOR BARNES: We frequently get the full rolls of the membership but then we don't get the dues and we just get any number of letters saying, I've never been billed for my dues.

Last year we had one county where they had a switch, after the new secretary was elected, then they had another switch and some 30-odd members apparently paid their American Medical Association dues which came in at a different interval from the state society dues and while they all had standing from the standpoint of the state society and the county society, we simply had a check, a gross check covering the AMA dues and nobody could tell you who the memberships were for.

We kept that from June until the end of the year and our auditor advised us that we had better get it out of our tills and so we wrote a refund check for the total amount and sent it back to them, and I think that has just been within recent weeks fully rectified.

There are special problems in fiscal handling. I know in one eastern county society one year the dutiful secretary collected all of the dues and accounted for them in the bank and on his rolls and then he moved to Texas to practice medicine, and several days before the Annual Meeting they all waked up to the fact that they had not gotten their membership cards and when they got to investigating and found these funds were lying in the bank, secure.

DR. BENTON: Mr. President, the reason we brought this up at this time, it is important for this to be considered, because apparently the AMPACT is coming up later and its success is going to depend a whole lot on whether or not we can do direct billing from our headquarters.

If, as far as the Finance Committee is con-

cerned, although they are not here I am sure they will go along, but if it increases the efficiency of the headquarters office, and if we can afford it, then we would go along with the AMPACT Committee in trying to establish that within our headquarters office.

DR. KERNODLE: I'll make a motion that the Finance Committee and the President with Mr. Barnes investigate with the IBM punch card man the cost and the procedure at hand and proceed to set up central billing, if it is feasible, on a reasonable basis. If it isn't and they want to bring it back to the September meeting, to do likewise. But in the meantime they will have the study behind them and I think that they will find it will be suitable that way they can go ahead with it.

I make such a motion.

DR. BENTON: With your permission, I'll make such a motion to make the record proper.

PRESIDENT RHODES: Is there a second?

DR. GARRISON: Second.

PRESIDENT RHODES: Is there any further discussion of this motion? It seems to me that there are perhaps objections on both sides of this but it does seem to simplify the billing. It would entail, of course, the determination of the county society dues which are not uniform and it would entail a refund to the county of the dues involved so that would be a problem that the headquarters office or the Treasurer would have to work out.

DR. PATTERSON: Couldn't that be done without the county dues, at least the Committee could decide whether the county dues would be included or not, on that type of setup.

PRESIDENT RHODES: Yes. That would be a point to have worked out.

Any further discussion of this?

EXECUTIVE DIRECTOR BARNES: I might mention just one other point, Dr. Rhodes. This has only come up since I have been in Greensboro and I have had no opportunity to study the provisions of the Constitution and By-Laws with reference to dues and whether or not there is some impediment in the language of the by-laws that might make it subject to non-uniformity and I don't think we want to start anything that is not uniform.

In other words, if a component society would have the right to say, "We reject this," then don't let's start it.

PRESIDENT RHODES: I think that is part of the investigation of the Committee.

Any further discussion?

SECRETARY STYRON: Would this be a matter for the House of Delegates to decide?

PRESIDENT RHODES: I don't believe that we are far enough along yet to get the House of Delegates in on it, I think it would be up to the Committee to recommend to the Council. It couldn't be implemented, I don't believe, without bringing it to the House of Delegates, and we are not prepared today to make such a recommendation, I don't believe, to the House of Delegates until this is studied.

DR. PASCHAL: So the Committee would actually explore the need for changing the Constitution and By-Laws?

PRESIDENT RHODES: Yes.

Any further discussion?

(No response.)

So many as favor the motion make it known by saying "aye."

Upon vote the motion carried.

Now, we have an item here under School Health. Dr. McLaurin, you had one other matter you wanted to bring up.

DR. McLAURIN: Dr. Frank Barnes talked to me just before I left to come here and there was one recommendation that he did want to get your approval on and that is that we endorse a four-week training period prior to engagement in the first football game in the fall.

It is our feeling that the first week of this should be devoted to non-contact preconditioning and then that there be three additional weeks of intensive training prior to the first game in the fall.

The Committee would like your endorsement of this idea.

PRESIDENT RHODES: You have heard Dr. McLaurin's statement.

DR. RAIFORD: Mr. President, a couple of days ago a couple of the boys who are very much interested in school health and athletics in our county brought up the same question and wanted to know how was the best way that we could approach the public school system in getting a two weeks non-contact period of training. They mentioned two weeks instead of one, which would simply in essence mean that the boy going to a high school and going out for the football team would start about a month early and would have conditioning course without bodily contact for two weeks, then their drills and scrimmage, the idea being to have them cut down on the number of school injuries in school athletics.

The only trouble with that, there would be an awful lot of children's fathers who would deny them the privilege of participating in sports if it meant taking them away from the tobacco field a month early.

I suggested to them that they recommend that through Dr. Barnes' Committee, then if this Council wanted to go on record as approving it, I thought the action might come from here to sponsor that or to approve it. Then it would have to go back through the regular channels to the schools.

PRESIDENT RHODES: Would you make a motion then to that point that he raised about 30 days.

DR. RAIFORD: I would make the motion then

that this Council goes on record as approving Dr. McLaurin's request from the Committee on School Health, to wit, that at least one week of non-contact conditioning precede actual fall training for athletic sports, or athletic participation.

And that the total period be at least 30 days of conditioning, at least one week of which shall be non-contact.

PRESIDENT RHODES: Is there a second to that motion?

DR. HARRY JOHNSON: Second.

PRESIDENT RHODES: Now, is there discussion on this motion?

DR. BRINN: I work very closely with our athletic teams at home and particularly with football. Now, I believe that it is set out somewhere in the public school relationship or their athletic grouping that football shall begin not sooner than August the 15th.

That's a pretty hot season and I have often felt that probably we weer putting these boys through a tremendous amount of exercise and hot weather.

We are going to have 30 days of conditioning and exercises and so forth and then school begins about the first or the second of September, by Labor Day anyway, and what are you going to do?

How do you get in that 30 days? They're all in a feverish fit to get playing some football, you know. Are we going to try to get those boys out there practicing by the first of August instead of the 15th of August?

That's too soon. Those things have got to be considered when you start talking about 30 days conditioning in contact.

I agree with you, I think that conditioning is the most important thing. I think we had a very strenuous conditioning effect of exercises this year with our outfit and we had the least amount of injuries, knee injuries and all that sort of thing that we have ever had.

PRESIDENT RHODES: Do you have any additional comment, Dr. McLaurin?

DR. McLAURIN: I just wanted to say that this is the reason we specified 30 days from the first game or prior to the first game rather than establishing any date hopeful that somewhere in between, perhaps moving it back four or five days and the first game could be delayed a week or two, but to require 30 days and then let them fight out this problem.

PRESIDENT RHODES: Wouldn't this have to be sort of an educational process? This would be a recommendation, it seems to me, on endorsing of principle as far as this Council is concerned.

Is there any further discussion?

(No response.)

So many as favor the motion make it known by saying "aye."

Upon vote the motion carried.

Next, Insurance Industry Liaison Committee. Dr. Frank Jones isn't here, but I have one matter under that committee that I would like to bring up and that is this, that about a year ago under Dr. Kernodle's administration an effort was made to establish a program of utilization, insurance utilization in North Carolina in the various hospitals. The responsibility for that was placed in the Committee Liaison to Hospital and Professional Relations.

Unfortunately this has lagged for several reasons. In the first place, the initial work done on this problem was in a certain county in the western part of the state and it was done by Dr. Frank Jones who is the chairman of the Committee Liaison to the Insurance Industry. He was appointed to the Committee on Hospital and Professional Relations under the chairmanship of Dr. Mees.

At the conclave last fall this matter came up but Dr. Mees was unable to attend the meeting of the committee and no action was taken at that time. In February of this year Dr. Mees resigned as Chairman of the Committee, not having pursued this matter at all.

Now, the question comes whether it or would it be better to place this responsibility under Dr. Jones' Committee since ha has most of the investigative material relating to one certain area and since we believe he would prosecute this project.

So it is brought to the Council for their rejection or endorsement. I would like to hear some sort of a motion that we could discuss relating to this matter of utilization.

We believe that the time has come when we have got to exert more of our energy in this direction. We have got to assume some responsibility for the utilization of hospital facilities.

Do I hear a motion?

DR. RAIFORD: Mr. President, I think before making any motion on this I would like to point out that there is a difference between over-utilization of hospitals and over-utilization of insurance, and therein lies the segment of this proposition which Dr. Jones' Committee can very well handle because it is when the insurance companies get abused that we hear from it through the insurance companies and it comes back through Dr. Jones' committee.

I do not think that Committee would rightly have the ability or the authority to go out and say, You can't send as many patients in to this hospital as you have been doing and keep them there two weeks instead of one week when the average is one week, except as it affected the insurance companies who are paying the bill.

This is progressing very rapidly, more rapidly, I think, than we realize, but the Blue Shield Plan in some areas is becoming almost exhorbitant and is almost killing the goose that laid the golden

egg.

Therefore I would like to make the motion that the function of Dr. Jones' Committee Liaison to the Insurance Industry be assigned the subject of abuse of over-utilization of hospital insurance, that is to say utilization of insurance and hospital facilities as it relates.

DR. KERNODLE: I would like to second the motion but I would also like to say that I would like to see the direction of this, you have already indicated into Frank Jones' hands, but I also think that this has to be handled as a hospital committee and both of them go hand-in-hand in the same committee. You can't separate hospital use from insurance use, but I do think that Frank is the one who knows about it and he should take us forward but he is going to have to work with the Hospital Liaison Committee too, and I would like to see that included in it, with my second.

PRESIDENT RHODES: Your point is that you would have to establish committees within the hospital staffs?

DR. KERNODLE: For utilization programs, yes, because it includes both phases and to do that you are going to have to utilize the Hospital Liaison and the Professional Relationships Committee, if you don't, you're going to lose your contact there.

I realize that we have had a weakness there in the last year but nevertheless I think with Frank directing it he should be able to utilize people on that committee.

PRESIDENT RHODES: He's a member of the committee, anyway.

DR. KERNODLE: Yes.

PRESIDENT RHODES: Any further discussion?

(No response.)

If not, so many as favor the motion will make it known by saying "aye."

Upon vote the motion carried.

The next, Review Plans for Industrial Education Centers for Training Medical Technicians. Dr. Beddingfield, would you like to comment on that?

DR. BEDDINGFIELD: Mr. President, this report is in the compilation. I think it is important and I urge everybody to read it.

Very briefly, the ad hoc committee has met with representatives of the State Department of Public Instruction under whose purview the industrial schols are operated. We have met with representatives of the North Carolina Society of Medical Technologists and what has evolved out of this thing is it almost solved itself, I think, at the present point.

There is a pilot program under way at the Wake Memorial Hospital which is endorsed by the American Society of Clinical Pathologists and by the Medical Technology group here in North Carolina to train a category of laboratory personnel known as a certified laboratory assistant, CLA.

This is a two-year training program. The technologists approve of this but they do not want the concept to arise that this does away with the need for a four-year highly trained, degree, medical technologist, and I think the Committee was effectively convinced that there is indeed a shortage of these highly-trained people and that this shortage will probably increase.

The Committee feels that this is not a matter of competition or — that we need both. We need more highly-trained degree four-year medical technologists and that there is a need for an adequately trained but lesser level laboratory assistant.

Among the recommendations of the committee was that we pursue through our participation in health careers and also through participation in other organizations such as rural health, health education and so forth, that we try to help out in the recruitment of technologists and people for the CLA program.

There was one specific thing that has been suggested. There are a number of vacancies in the schools that are turning out four-year degree technologists here in North Carolina, the schools have had a good many openings, no students, or a lesser number of students than their enrollment potential.

Several reasons were advanced for this. One of them is that there is a lack of funds, and there is a scholarship program that the Medical Care Commission has had for many years that provides some scholarship help for a person studying to be a medical technologist but these funds are only applicable in the fourth year of training. You have to go through three years of college and then use it — most people, by the time they've made it three years, they've got it made anyhow one way or another.

It was thought by the technology group that if these funds which are administered by Medical Care could be made available earlier during the period of training that this would aid more in recruitment. I think this is a very modest appropriation and with the need, with the increasing complexity of laboratory medicine and the need for more four-year technologists, it would be the hope that the next General Assembly might want to increase the scholarship fund which is very limited now, I think it's $75,000 for a biennium, and to remove the restriction that it is applicable only to the fourth year.

The Committee recomends that if the technologists espouse such legislation that the Society support them in that.

A further recommendation of the Committee was that we approve of the two-year school that is now set up as a pilot program at Wake Memorial, that we watch it very carefully, that any such program that is set up anywhere in the state to train laboratory personnel be, even though it might

be under the administrative auspices of Industrial Education Center, that it be within the walls of a hospital and that the teaching program conform to the American Society of Clinical Pathology curriculum standards and that it be administered by a physician, preferably a pathologist.

Those were the recommendations of the Committee.

PRESIDENT RHODES: Thank you.

You have heard Dr. Beddingfield's report for his Commitee. What action will we take on this report?

DR. REECE: I would like to make a comment that the Section on Pathology has been contacted by them and we certainly approve of this approach and want to see it continued both in the Certified Laboratory Assistants and the highly-trained technologists.

DR. HARRY JOHNSON: I move we approve the report.

DR. LYNWOOD WILLIAMS: Second.

PRESIDENT RHODES: The motion has been made and seconded that the report be approved.

Any discussion?

(No response.)

If not, so many as favor the motion make it known by saying "aye."

Upon vote the motion carried.

Ed, we thank you for a job well done.

The next item is a matter of the Report of the Board of Medical Examiners. Dr. Combs is not here. Jim, could you just give us a run-down on what his problem is?

EXECUTIVE DIRECTOR BARNES: It is essentialy this, that the registration act was passed in the General Assembly in 1957 and provided for biennial license registration fee. It also provided for a penalty for the nonpayment of that fee within a certain period after it became due on January the 1st 1958.

We understand that this registration when it accrues at the second defaulting year also carries a second defaulting penalty, so that a member now who failed to register his license in 1958, he may have been licensed in North Carolina and been in the Armed Forces Service, and has now accrued a liability of some $60 before he can reinstate his license and there is tending to be some sentiment to reject that sort of thing.

Of course, as it goes on it may continue and in 10 years be 10 times that, registration and penalty. To do anything about it would require an amendment of the registration act and I guess Dr. Beddingfield and Mr. Anderson ought to discuss what would be involved in that.

I don't know whether you want to do anything about it or not. It does create some problems here and there in isolated instances.

PRESIDENT RHODES: That's certainly a matter of concern to the Legislative Committee and I should think we might refer that to the Committee.

MR. JOHN ANDERSON: A proposal was submitted to amend which was submitted to the legislature to exempt the members of the Armed Forces from this registration but the bill was withdrawn and that was not enacted. It was not pushed at all.

I think that probably would be under consideration by the Legislative Committee again, whether or not you want to open up the Medical Practice Act for that purpose, I don't know.

DR. BEDDINGFIELD: My feeling last session was that we did not want to do this because of certain dangers that if it was opened up something else might be tacked onto it. If we had to open it up for something else, then we would tack this on and let it ride through and I personally would hope that that would be our continuing policy.

PRESIDENT RHODES: Unless there is some disposition on the part of the Council to give the Legislative Committee some direction, suppose we accept this as information.

DR. KERNODLE: I so move.

(The motion was seconded.)

PRESIDENT RHODES: As many as favor the motion make it known by saying "aye."

Upon vote the motion carried.

Now, Dr. Clark is here. Do you have any report for the Delegates to the AMA, Dr. Clark?

DR. BADIE T. CLARK: No, I do not.

PRESIDENT RHODES: We have a few more items, one of which may take a little time. Do you want to continue until we finish? Is that your wishes?

(Assent indicated.)

All right, the next, Consider N. C. MedPac and AmPac dues billing. Dr. Bivens, Dr. Kernodle and Mr. John Anderson.

Dr. Kernodle.

DR. EDWARD S. BIVENS: Let me just start off briefly. We have had the MedPac now for two years and we have conducted mail campaigns, mainly educational, run ads in the state medical journals, we have presented this to the ladies auxiliary in various counties and at various meetings.

We now have a total membership of 217; 182 doctors and 35 wives, 217 total members in all in North Carolina, and we have a balance of money on hand of $4,868.00. We are not getting very far with our campaign to get a large number of doctors into MedPac and AmPac paying $20 dues, $10 tor us and $10 for AmPac.

It has been discussed with several of you and John Kernodle has brought back information in another state where they bill the doctors on a voluntary basis along with the state dues and have a closer liaison with the state medical society office, and now I'll let John talk about it.

PRESIDENT RHODES: All right, John.

(Discussion off the record.)

PRESIDENT RHODES: I would like to go back on the record and ask if there is a motion on the action we might take in relation to the suggestions that have been made.

DR. KERNODLE: Mr. Chairman, I would like to make the first motion. I would like to make the motion that we, the Medical Society set up a budget with a contribution or budget for educational facilities for MedPac. That's the first motion. I would like to make that, and that a sum of $5,800 or the pro rata of that part for the rest of this calendar year.

PRESIDENT RHODES: That money would be administered by MedPac?

DR. KERNODLE: It would be.

PRESIDENT RHODES: Is there a second to that motion.

DR. BEDDINGFIED: Is this a grant or a loan?

PRESIDENT RHODES: As I understand it would be a grant, wouldn't it?

DR. KERNODLE: A grant for educational purposes.

The second part of the motion would be that the guidance and direction of this program would be placed under the direction of the medical society with facilities either in Raleigh or in the building thereof, depending on the legal advice that we get after we look into some of the problems.

PRESIDENT RHODES: You have heard the full motion. Is there a second to the motion?

DR. REECE: Second the motion.

PRESIDENT RHODES: Dr. Reece seconds the motion.

Now, is there any further discussion of this motion?

DR. PASCHAL: You have an outsider who'd like to talk to this, too.

MR. RICHARD NELSON: May I make a comment?

PRESIDENT RHODES: Yes.

MR. NELSON: I am not sure from the discussion this afternoon that this is clear and I presume that what Dr. Kernodle is talking about in this kind of an operation is consistent with the sort of approach that has been used in other states, and that is when we are talking about an educational program and the fiscal operation of the Pac program within the state that we are talking about such things as informing the individual members about the MedPac program, the mechanical process of billing and the fiscal and managerial things that are involved.

Now, when you come into such things as a candidate evaluation committee and the allocation of funds to various individuals and campaigns, this is not the area of educational activities, so that in doing this the MedPac Committee of physicians would be the people who would be doing this. so that there would be and, as these programs have been developed in other areas, you have two specific and separate budgets, one in which you have money which is educational money, which can be used for the fiscal and managerial operation of the educational phase, and you have another set of accounts which are separate and distinct in which you have the political dollars and you can take political dollars and use them for the educational program, but you can in no case take the educational money and use it the other way too.

So that with clear-cut bookkeeping procedures you can keep this separate. I thought there might be some confusion on that.

PRESIDENT RHODES: Thank you, Dick.

Any further discussion?

SECRETARY STYRON: I have a feeling that the State Society would be blamed for participation in political activity which was not strictly a function of the State Society and I am afraid that however well this was separated and these two areas were explained, particularly to our newspaper, it would never be clearly stated in its editorial policy nor in its news coverage.

I too would believe that we are treading on rather dangerous ground here.

PRESIDENT RHODES: Any further discussion?

(No response.)

I would very briefly say this, that I had something to do with the initiation of this program inasmuch as I happened to be at the meeting in Chicago when the organizational guidelines were set up and it certainly was our feeling at that time that this program should be established outside of the Medical Society's purview, but with its benediction.

I am sure that there has been a change in attitude. I must confess that I personally have still some reservations about the advisability of coordinating our two activities as one activity, and I believe with some of the other comments here that we should perhaps give this further consideration before we make a move in that direction.

That's my comment, and I would like to hear further discussion if there is discussion.

DR. BENTON: Would it be in order to move that it be tabled for the time being?

SECRETARY STYRON: It should be deferred rather than tabled.

PRESIDENT RHODES: We would have to defer it rather than table it, or postpone.

DR. BENTON: You still have another meeting?

PRESIDENT RHODES: I hadn't planned one.

DR. PATTERSON: Question.

PRESIDENT RHODES: Did you call for the question?

The question is on the floor.

DR. BIVENS: Could I add one word to it. I

have been connected with it closer than anyone else in the state for several years. There is nothing wrong with the State Medical Society providing the money for educational purposes, the $5,800 or less, if need be. We haven't had anything.

There is nothing wrong with us considering tying MedPac in closer with the state office. It is not necessary that we do it at this time, but if we even knew we could consider it, study it, that would be helpful to us.

DR. PASCHAL: Mr. President, did the motion say consider it or do it?

DR. KERNODLE: Well, I first made one motion for moneys and then I was questioned about it so I added the other, that we consider moving into the Raleigh area with it. I think probably we might separate the motions and it would be wise, if permissible, to separate the two motions, which I started to do originally.

PRESIDENT RHODES: Would you restate your first motion?

DR. KERNODLE: I move that the Society grant to MedPac of North Carolina $5,800 for educational purposes, this money to be kept in a separate fund and utilized for educational purposes only. If that's agreeable.

PRESIDENT RHODES: Dr. Paschal, you're Parliamentarian, can we vote on that part of the motion?

DR. PASCHAL: Was it seconded? If the seconder will accept it.

DR. REECE: I accept it.

DR. KERNODLE: I just withdraw my first motion and make this one as a new one, if he accepts the withdrawal.

PRESIDENT RHODES: With the permission of the House.

DR. KERNODLE: With the permission of the House.

PRESIDENT RHODES: Is it the sense of the Council that permission be granted to withdraw the motion?

All in favor say "aye."

The motion carried.

Now the motion is on the floor.

DR. KERNODLE: That $5 800 be granted for educational purposes to be utilized as such.

PRESIDENT RHODES: That has been moved and seconded.

Any discussion of that motion?

(No response.)

So many as favor the motion make it known by saying "aye."

(A chorus of "ayes.")

Opposed "no."

(Several "noes.")

I believe the "ayes" have it.

All right, now, John, do you have anything further?

DR. JOHN KERNODLE: I would like to move that we consider the problem of moving MedPac into the vicinity of Raleigh, either in the office of the Medical Society under the jurisdiction of the Executive Director, or into the vicinity of the office and let him have actual operational jurisdiction over the Raleigh office.

PRESIDENT RHODES: Is there a second to that?

DR. REECE: Second the motion.

PRESIDENT RHODES: Dr. Reece seconds the motion.

PRESIDENT RHODES: You're talking about the MedPac?

DR. KERNODLE: The MedPac move to the Raleigh area, that this be consideerd.

DR. PASCHAL: Do you imply that it be considered by the Board of Directors of MedPac?

DR. KENRODLE: No, that it be considered by the officers of the Medical Society and the legal counsel.

DR. BEDDINGFIELD: You're just considering Raleigh or the area?

DR. KERNODLE: In the area of the Medical Society Office which is Raleigh.

(Discussion off the record.)

I withdraw that, even though it has been seconded, and I will move that a committee be appointed by the President to investigate the possibility of moving MedPac headquarters into Raleigh.

DR. BRINN: I'll second the motion.

PRESIDENT RHODES: Any further discussion?

(No response.)

If not, so many as favor that motion make it known by saying "aye."

Upon vote the motion carried.

(No response.)

So ordered.

We have to go back and adopt the reports of all these committees. I overlooked that point. Do I hear a motion that the committee reports be approved?

DR. BRINN: I move they be adopted.

PRESIDENT RHODES: Is there a second?

DR. RAIFORD: Second.

PRESIDENT RHODES: The motion has been made and seconded that the committee reports be adopted as a whole.

As many as favor the motion make it known by saying "aye."

Upon vote the motion carried.

The next item is Consider the Question of Legality of RN Passing Levin Tube, Nasal Gastrodudenal Catheter for Either: (1) diagnostic purposes, (2) therapeutic purposes.

We have a letter from Dr. Alfred Hamilton addressed to me in behalf of the Rex Hospital medical staff. "I would like to request the Executive Council of the Medical Society to take a position as

to whether the passage of Levin tubes into the stomach is the 'practice of medicine' or can be delegated to qualified and trained personnel. If your position is that the latter is the case, I believe it would be well through your attorney to have this position affirmed by the Attorney General in order that the administration of Rex Hospital will be able to reasonably permit the training of nurses and the functioning of nurses in this regard.

"I am not absolutely certain but I am under the impression that lavage of infants is undertaken by nurses and I personally believe this whole problem parallels that which existed in reference to the initiation of transfusion by nursing personnel. Alfred T. Hamilton, M.D."

I would say this, that after receiving this letter I attempted to contact people in different areas, different doctors in different hospitals to see if I could get some information as to the procedures that are being followed at the present time.

They vary considerably in various hospitals. Some hospitals do not, particularly the teaching hospitals do not permit the nursing personnel to pass Levin tubes, except the nurse anesthetist and in the premature nurseries they are allowed to lavage premature infants.

In other hospitals they are allowed to do diagnostic gastric suctions but are not allowed to pass tubes for therapeutic purposes, to establish, for instance, drainage. There is a great deal of variance over the state in the procedures that are followed but in most of the hospitals in some category the passage of nasal gastric tubes is permitted.

I have a letter from the Director of the Nursing Service at Rex Hospital which I think I must present to you and that reads as follows:

"I hope I have not been too long in conveying to you the majority opinions I have received concerning the passage of Levin tubes by registered nursing personnel. While we know the ultimate decision is not in our hands, we appreciate the opportunity of expressing our feelings. We would hope that: one, since this has not been a heretofore accepted nursing procedure the performance of this procedure would be a voluntary act by the nurse after sufficient inter-service training; two, nurses will not be permitted to pass Levin tubes on patients with certain diagnoses such as esophageal bleeding, acut gastro-intestinal bleeding, hemorrhage, et cetera; three, nursing education in the State of North Carolina would be informed of this change in the law."

She further has approached me and stated that since there is no training in the undergraduate nursing schools for this purpose that the graduate nurse has had no background in most instances for this procedure and it would require a training program to train such personnel.

If you will recall two years ago, I believe it was, this Council had the matter of the initiation of transfusions and other intravenous medications by nurses brought before it. It was finally agreed that this procedure had been followed in many of the hospitals in North Carolina and the Council went on record as approving the initiation of transfusions and administration of other intravenous medications by a nurse under the supervision of and at the direction of the physician, the nurse having prior special training for this purpose.

We requested our legal counsel to obtain a ruling from the Attorney General and he approved this position based on the fact that it was approved by the medical society and was considered to be customary procedure.

We seem to stand in that same position in regard to the passage of Levin tubes and I will ask Mr. John Anderson if he has any comment to make. I have turned over to him a letter written by the legal counsel for Rex Hospital to the Administrator of the Hospital in relation to this request by the staff.

MR. ANDERSON: Mr. President, I think if you wish to obtain such a ruling from the Attorney General the procedure would be for the Counsel representing this Society on your own advice or of the Committee to approve the practice as a medical procedure, as a customary and approved practice in the community in North Carolina. That is. that the tube be passed by qualified personnel whose qualifications the physician is aware of and personally vouches for, as was done in the other instance.

Then to pass that approval on to the Board of Medical Examiners and request the Board to put the question to the Attorney General as a state agency, and the Attorney General then would be in a position to answer the inquiry. What his ruling would be, we don't know, but he would lean heavily upon the advice of the Medical Society and of the profession with respect to whether or not it was considered safe and proper for the procedure to be performed by a nurse, a nurse or other personnel whose training and qualifications are vouched for by the attending physician.

PRESIDENT RHODES: There is one other point that the Director of Nurses raised to me verbally and that was that the nurses felt that this should be a volnntary matter, that the nurse should not be subject to direction if she felt incompetent or unqualified to follow out this procedure.

MR. ANDERSON: I wouldn't think there would be any doubt about that.

PRESIDENT RHODES: What is the wish of the Council in this regard?

DR. RAIFORD: Mr. President, I think this is very similar to the category of starting intravenous infusions and transfusions and in some cases I believe it might be considered more important to have a nurse do it, pass a Levin tube, than to

start an infusion for the simple reason of the poison case which comes into the emergency room and the doctor is called and it may take him 10 minutes to get there and time is of the essence when it comes to emptying a child's stomach of a poison and I think it would be very negligent of the doctor to say, Get me a tube ready, I'll wash it out when I get there.

Therefore, I would move that this Council go on record as approving in the same way as we did the nurses starting intravenous fluids. In other words, that we approve a qualified personnel passing a Levin tube under the direction of the attending physician and at his instructions.

DR. KERNODLE: I second that motion.

PRESIDENT RHODES: You have heard the motion and second. Any further discussion?

(No response.)

If not, so many as favor the motion, make it known by saying "aye."

Upon vote the motion carried.

PRESIDENT RHODES: Then we have here statement of principle from the Sub-Committee on Nursing and Patient Care which I brought to this Council before and it endorsed the principle. Now they come back with a statement of procedure in regard to hospital visitation:

"The primary objective of the North Carolina Committee on Nursing and Patient Care is to pursue the ways and means to provide better patient care for the citizens of North Carolina. The Committee is especially well qualified to serve this purpose since it affords a common medium for discussion and action by the representatives of those whose principal responsibility is to care for the sick, namely, physicians, nurses and hospital administrators.

"The Committee recently has been concerned with the misuse of hospital visiting. It has presented the matter to the Medical Society of the State of North Carolina and the North Carolina State Nurses Association and the North Carolina Hospital Association, all of whom are increasingly aware of the complexities of this problem.

"The three groups whose primary concern is the patient recognize there are benefits in proper patient visiting. It is their opinion, however, that too frequently the abuses outweigh the therapeutic advantages.

"The seriousness of this situation is of sufficient significance that positive and united action be required. Believing that the citizens of North Carolina, when aware of the harmful effects of improper visiting will cooperate to insure the speedy recovery of their loved ones, it is agreed therefore that the Medical Society of the State of North Carolina and the North Carolina State Nurses Association and North Carolina Hospital Association with other groups who have interest and concern in this problem should individually and jointly sponsor a program that will provide an understanding of the need for and acceptance of proper visiting controls.

"In the fulfilment of this objective the immediate joint action of the three above-mentioned groups with the cooperation of allied groups interested in the problem is urged. We pledge our support."

Now I understand that the North Carolina State Nurses Association and the North Carolina Hospital Association have already approved this program and I bring this to your attention since we are requested to take an action on it and to refer it, I presume, to our Nursing Committee.

That would be the place it would go, I would think.

DR. PATTERSON: I move it be approved.

DR. RAIFORD: Second.

PRESIDENT RHODES: As many as favor the motion, make it known by saying "aye."

Upon vote the motion carried.

We have had a request from the AMA, as a State Society, to make some representation to the members of our congressional delegation in regard to the deletion of the provisions of the Keogh-Smathers Bill and the indication that the IRS is going to abolish the Kintner regulations in regard to tax shelter under a corporation.

This is a long resolution which Jim has prepared with the help of John Anderson. It simply is a resolution directed to our people in the Congress requesting that they favor legislation to correct these inequities so far as self-employed people are concerned under the tax laws.

John, do you want to make any comment on that? I'll read this, if you wish.

MR. ANDERSON: I think you have explained it sufficiently, Mr. President.

DR. BEDDINGFIELD: I move the adoption of the resolution.

DR. PATTERSON: Seconded.

PRESIDENT RHODES: The motion has been made and seconded.

As many as favor the action will say "aye."

Upon vote the motion carried.

I have two resolutions from the Lenoir County Society. The first one is directed to — is a request to the AMA Judicial Council and it reads as follows:

"Whereas the ethical and legal limitations of the physicians participating in court ordered pretrial psychiatric examinations have not been clarified,

"Therefore resolved that the House of Delegates of the North Carolina Medical Society request the House of Delegates of the American Medical Association to ask the AMA Judicial Council to rule on the ethical and legal limitations of the physicians participating in the court ordered pretrial psychiatric examinations when the accused or his legal representative have not requested it."

In other words, this, it seems to me, is in opposi-

tion to a pretrial psychiatric examination when the person involved or his legal counsel has not requested it.

John, do you have a comment on that?

DR. BEDDINGFIELD: May I ask the Councilor from Lenoir a question? Does this pertain to a local care or are we still dealing with General Walker?

DR. WILLIAMS: I don't know. I think this arose out of probably the General Walker case, as I understand it, and the things that happened after that and they were seeking a clarification for not only local, state, but national.

We have no local problems that I know of.

PRESIDENT RHODES: This, of course, if we approve, will be referred to the House of Delegates for action.

DR. BEDDINGFIELD: Then from there to the AMA, all the way to the AMA.

PRESIDENT RHODES: All the way to the AMA Judicial Council, yes.

It would be referred to the Resolutions Committee in the House of Delegates.

DR. BEDDINGFIELD: I move that it be referred to the House of Delegates from this body.

PRESIDENT RHODES: Do I hear a second to that motion?

DR. WILLIAMS: I second it.

So many as favor the motion make it known by saying "aye."

Upon vote the motion carried.

I have another one from Lenoir County and this is titled Opposition to the Nationalization of Medicine.

"Whereas the House of Delegates of the American Medical Association in June 1963 called for a re-evaluation of its previous endorsement of bricks and mortar federal aid and,

"Whereas the evaluation of the Public Health Service Act 1944 and subsequent additions and amendments thereto beginning with the Hill-Burton Act of 1946 and continuing through the present Harris proposals, H.R. 1041 and H.R. 1042, lends credence to the opinion that all of these acts are a part of a steady evolving plan to accomplish the nationalization of medicine attempted earlier by the discredited Waggoner-Murray-Dingell Bills, and,

"Whereas the ruling of the United States Fourth District Circuit Court held that the acceptance of Hill-Burton funds for private hospitals put such hospitals into a federal-state public health program and makes them a part of 'state action',

"Therefore resolved that the House of Delegates of the North Carolina Medical Association hereby affirms its continuing opposition to bricks and mortar federal aid, and,

"Further resolved that the House of Delegates of the North Carolina Medical Association urgently calls upon the House of Delegates of the American Medical Association to thoroughly re-evaluate its conflicting stands regarding federal aid and to come out with a statement based on principle in strict opposition to all proposals which may lead to the nationalization of medicine, regardless of the route such proposals may take."

It is my impression that the American Medical Association took the position that it would approve bricks and mortar.

DR. BEDDINGFIELD: If we endorse this, this would be us voting to do away with Hill-Burton all together right now, wouldn't it?

EXECUTIVE DIRECTOR BARNES: No, it would be voting for a re-evaluation by AMA of the support of these programs, including Hill-Burton.

DR. WILLIAMS: Mr. President, that's from my local county society. It was presented to us, it all sounded good, it was passed with little discussion and went right ahead.

What is really implied in the minds of the Legislative Committee that did this, I'm afraid I couldn't say, because there was very little discussion at the time about it, but that was the creation of our local Legislative Committee.

PRESIDENT RHODES: This does have rather far-reaching implications.

DR. BEDDINGFIELD: Was this submitted in time, in the 60 days prior?

PRESIDENT RHODES: No.

It was not submitted. I would say this about that point. We have a provision in our By-Laws that resolutions (to the House of Delegates) should be submitted at least 60 days prior to the Annual Meeting and we sent, as of the first of March, when we realized and we had no resolutions, a telegram to all the county societies directing or rather pointing out this provision in our By-Laws and suggesting that they submit their resolutions by the 10th of March.

The reason I brought this here was because there has been some discussion about our not getting adequate resolutions from our membership either to this society or to the AMA and I thought I ought to present it on that basis.

DR. RAIFORD: Mr. President, would it be in order to refer this to the Committee on Legislation for further consideration and study?

DR. PATTERSON: I so move.

EXECUTIVE DIRECTOR BARNES: The only way this can get to the floor of the House of Delegates is by recommendation of the Executive Council to the House of Delegates, that it be considered or that it be presented by Lenoir County delegation on the floor of the House of Delegates a resolution not presented 60 days in advance and request a vote to consider it, and if there's two-thirds vote then you can consider it. If there is not a two-thirds vote then the thing is lost

PRESIDENT RHODES: They can either invoke the by-law on this issue or we can recommend.

DR. BENTON: I move the by-law be invoked.

(Not seconded.)

PRESIDENT RHODES: I received this on the 30th of April.

DR. PASCHAL: I would think, Mr. President, before we approve this that we would need to know more specifically what they referred to and what the background of this resolution is.

DR. FLEMING FULLER: I can't make a motion but I would just make a suggestion. I think our Legislative Committee would appreciate, if this is the way you feel, as George mentioned, that maybe they be asked to clarify this.

DR. PASCHAL: I would make a substitute motion to the effect that we return this to them pointing out that it came in after the deadline and secondly saying that we would like further clarification of the intent of their resolution, and to be given more additional background.

DR. BRINN: Second.

PRESIDENT RHODES: The motion has been made and seconded. Any further discussion?

(Call for the question.)

If not, so many as favor the motion let it be known by saying "aye."

Upon vote the substitute motion carried.

EXECUTIVE DIRECTOR BARNES: I might point out, President Rhodes, that if the Lenoir County Delegation tomorrow saw fit to present this resolution on the floor of the House of Delegates, and they were sustained in a two-thirds vote, then the House could consider it.

PRESIDENT RHODES: That's right.

There is a request from the President-Elect that we consider the appointment of a committee to review the committee structure in order that the number of committees could be considered, their functions and the possibility of perhaps reorganizing our committee structure.

I would like to hear a motion that I be authorized to appoint such a committee to work with the President-Elect in this regard.

DR. BEDDINGFIELD: I so move.

PRESIDENT RHODES: Do I hear a second?

DR. PASCHAL: Second the motion.

PRESIDENT RHODES: Any discussion of this motion?

(No response.)

As many as favor the motion make it known by saying "aye."

Upon vote the motion carried.

I would like to appoint Dr. Fleming Fuller Chairman, Dr. Styron and Dr. Koonce.

DR. RAIFORD: Mr. President, may I ask if those members meet with their Commissioners at breakfast tomorrow morning.

(Announcement.)

PRESIDENT RHODES: We have one other matter, if you will recall at the last meeting of the Council there was a discussion relating to the Scientific Members.

PROCEEDINGS
EXECUTIVE COUNCIL MEETING
THE MEDICAL SOCIETY OF THE STATE
OF NORTH CAROLINA

E X T R A C T

May 2, 1964

* * *

PRESIDENT RHODES: We have one other matter. If you will recall, at the last meeting of the Council there was a discussion relating to the Scientific Members and a motion was made to change our bylaws in order that the Scientific Membership might be eliminated and that negro physicians be granted full membership.

Then a motion, after considerable discussion, was made to table. The motion was adopted. The motion was to table till the May Meeting, and therefore we must reconsider it as old business, unfinished busines.

It now is open, therefore, for discussion.

Do we have the original motion?

DR. PASCHAL: I have it here.

PRESIDENT RHODES: George, would you present the original motion, please?

DR. PASCHAL: Mr. President, as you pointed out, Dr. Sams made the motion that this be tabled until our May Meeting. On page 127 of the report on the Medical Society of North Carolina Minutes of the Meeting of the Executive Council, at the bottom of the page, on 127, the righthand column, you will see there the motion that was made.

In order to bring this to the Council at this time, I would like to make a motion that this Council approve and ask the House of Delegates to further approve a change in our Constitution and By-Laws which would make it possible for any person who meets the specified requirements for membership to be granted such membership in this Society, as active members.

PRESIDENT RHODES: You have heard the motion.

A VOICE: Would you read it again?

PRESIDENT RHODES: Dr. Paschal, would you re-read the motion as you have it there?

DR. PASCHAL: I move that this Council approve and ask the House of Delegates to further approve the change in our Constitution and By-Laws which makes it possible for any person who meets the specified requirements of membership to be granted such membership in the Society as an active member.

PRESIDENT RHODES: Are there any questions about the motion?

(No response.)

If not, so many as favor the motion make it known.

I wil authorize the Secretary to call the roll.

SECRETARY STYRON: Ted Raiford.
DR. RAIFORD: Yes.
SECRETARY STYRON: William Hollister.
DR. HOLLISTER: Yes.
SECRETARY STYRON: Fred Patterson.
DR. PATTERSON: Yes.
SECRETARY STYRON: John Reece.
DR. REECE: Yes.
SECRETARY STYRON: Wayne Benton.
DR. BENTON: No.
SECRETARY STYRON: T. P. Brinn.
DR. BRINN: No.
SECRETARY STYRON: Lynwood Williams.
DR. WILLIAMS: No.
SECRETARY STYRON: Dewey Bridger.
DR. BRIDGER: No.
SECRETARY STYRON: Ed Beddingfield.
DR. BEDDINGFIELD: Yes.
SECRETARY STYRON: Ralph Garrison.
DR. GARRISON: No.
SECRETARY STYRON: George Paschal.
DR. PASCHAL: Yes.
SECRETARY STYRON: Ed Bivens.
DR. BIVENS: Yes.
SECRETARY STYRON: Harry Johnson.
(There was no response.)
SECRETARY STYRON: Lynch Murphy.
DR. MURPHY: Yes.
SECRETARY STYRON: John Kernodle.
DR. KERNODLE: Yes.
SECRETARY STYRON: For is 10 and 5 against, that is not including the Chairman.

PRESIDENT RHODES: That it seems to me is the majority of the total membership of the Council and — I want to be sure how many are absent. There are two absent. I think we ought to report this as the vote.

SECRETARY STYRON: Dr. Sams is absent and Dr. Harry Johnson is absent.

PRESIDENT RHODES: Two absent, so the motion is carried.

Is there any further business to come before the Council?

(The Council then proceeded to other business.)

* * *

(Transcript of proceedings under this subject furnished in sepaarte binder.)

(See next page)

PRESIDENT RHODES: Is there any further business to come before the Council?

MR. ANDERSON: Mr. President, I hate to talk about money, but I have heard that there is a little money in a bank account, in the name of the Medical Society, in Raleigh that Dr. George Thornhill told me about that he is custodian of. He doesn't know where it came from except he succeeded to the account as Treasurer of the Section on Eye-Ear-Nose and Throat or Ophthalmology. and he doesn't know what to do with the money.

I was just making the suggestion that possibly you would want to authorize the Executive Director or the Finance Committee to accept the money, if it can be turned over to this Society.

PRESIDENT RHODES: Do I hear a motion to that effect?

DR. BIVENS: I so move.

DR. BENTON: Second.

PRESIDENT RHODES: To authorize the Director to accept the money, if it can be turned over to the society.

(Several seconds.)

As many as favor that motion will make it known by saying "aye."

Upon vote the motion carried.

We still have two items here which I was not aware of until this moment. The first one of these is from Annie V. Scott at Chapel Hill, it says:

"Since I have attained the age when I am granted active dues execpt AMA and AMA's fellowship in the Academy of Pediatrics, I am writing to ask if the Medical Society of North Carolina can grant me dues-free membership in the Medical Society of North Carolina."

Is she a member, or has she been a member?

EXECUTIVE DIRECTOR BARNES: She is a member and has been a member since 1954. The by-laws require that she have consecutively paid dues for 20 years and attained the age of 70.

PRESIDENT RHODES: What are the wishes of the Council?

DR. PASCHAL: I would call her attention to our rules and regulations and tell her that we do not feel that she can qualify.

EXECUTIVE DIRECTOR BARNES: There is another one here that joined the Society this year and of course paid dues for this one year and he has requested the same sort of consideration.

PRESIDENT RHODES: Shall I read this one?

This is from Dr. Robert W. Williams of Wilmington, North Carolina.

"Enclosed please find second report on our membership for the year 1964," and then it goes on, "in regard to our conversation two weeks ago, I would like to have you ask the Executive Committee if some policy to govern physicians who have spent the most of their active professional careers in another state and who have then taken residence in North Carolina might be made."

"For example, we have Dr. Clarence Darrow who was professor of pediatrics at Yale for a long time. He will soon be 70 years old and I imagine would like to continue as a member of the State Society. Since he will be excused from dues by the American Medical Association. This need not be done for the year 1964 in Dr. Darrow's case, but if some modus operandi is available, let us know for next year."

It would be my understanding that under our Constitution and By-Laws neither of these people would be eligible for exemption from dues.

Is that correct?

VOICES: Yes.

PRESIDENT RHODES: All right, do I hear a motion?

DR. PASCHAL: I move that they be informed that they do not meet the requirements for dues-free coverage.

PRESIDENT RHODES: Do I hear a second?

DR. BRINN: Second.

PRESIDENT RHODES: Any discussion of this motion?

(No response.)

If not so many as are in favor say "aye."

(A chorus of "ayes.")

The motion carried.

Is there any other business?

DR. BEDDINGFIELD: Just one little thing. It is just a matter of protocol. Senator John Jordan whom I talked to today knew that we were in session and he is probably going to drop by our House of Delegates tomorrow afternoon and I just wanted because of the help he gave us in the Kerr-Mills fight and other matters in the state legislature I wonder if it would be all right if he came in and if he were accorded the honors of the floor and recognized with no reference to his present political campaign.

PRESIDENT RHODES: As all of you know, he has been very active in our behalf in legislative matters.

Do I hear a motion?

DR. BENTON: I so move.

DR. REECE: Second.

PRESIDENT RHODES: So many as favor the motion make it known by saying "aye."

The motion carried.

Is there anything else? Does this clear the board?

We have one other matter.

VOICES: No.

(Laughter.)

PRESIDENT RHODES: You will have to present it, Jim, because I have had no opportunity to look at it.

EXECUTIVE DIRECTOR BARNES: This is simply a communication from the Subcommittee Chairman of the Committee on Mental Health opposing a survey of the physicians in North Carolina based on a questionnaire that was developed by the Academy of General Practice and then rejected by the Academy of General Practice because the protocol was not in conformity with their contract with the surveying group and it has been changed with two words in here and it is proposed to be adopted by the Committee on Mental Health and the same survey conducted by the Mental Health Committee of the State Medical Society.

I have apprised Dr. John McCain of this and he thinks we ought to bring it to your attention and Dr. McLaurin here can explain it.

DR. McLAURIN: Jim has pretty well stated it. We are in this because the Academy is interested in making a survey of the content of general practice in North Carolina. We tried to work with the people who are pushing this survey. It happens that they have done a portion of the survey they want to do and they are trying by some means or other to finish it. No matter what you call the survey, they are still trying to get their information.

This has been altered to apply to mental health clinics and other than that it is almost identical to the one that they presented to the Academy. We rejected it because we felt that it did not meet our needs and they pulled out of our survey completely.

I think that your action should be along the lines that you would not endorse on behalf of the Medical Society any survey unless it was approved by — approved in protocol by the committee, and I think it should be looked at very closely.

DR. KERNODLE: Mr. Chairman, I move under those circumstances we do not endorse the participation — give endorsement to this survey.

DR. BENTON: Second.

PRESIDENT RHODES: The motion has been made and seconded. Is there discussion of this motion?

DR. PASCHAL: Mr. President, do we want to have the committee to review it and study it further?

DR. McLAURIN: I think it might be in order, that a survey perhaps on mental health practice in North Carolina would be in order, but I doubt seriously if a protocol designed to survey general practice would give you the information needed.

DR. PASCHAL: I would ask you accept that provision, that it be referred back to the committee for further study?

DR. KERNODLE: Yes.

PRESIDENT RHODES: Does the second accept it?

DR. BENTON: Yes.

PRESIDENT RHODES: Any further discussion?

(No response.)

So many as favor the motion make it known by saying "aye."

The motion carried.

Now Jim's got another letter.

(Laughter.)

EXECUTIVE DIRECTOR BARNES: I'm sorry, Mr. Chairman, but these things come in and if they can't be handled, I don't know what to do with them.

PRESIDENT RHODES: Yes.

EXECUTIVE DIRECTOR BARNES: This is a communication from the Forsyth County Medical Society dated April 23, received on April 26th and reads as follows:

"In the past two to three weeks we have re-

ceived copies of letters from the American Medical Association and Wake Forest College and Winston-Salem Teachers College stating that their respective institutions have been receiving copies of Today's Health through the courtesy of the Women's Auxiliary of the AMA and suggesting that the auxiliaries discontinue their complimentary copies and that the local medical society might want to furnish copies.

"Apparently about 15 or 20 copies of this publication have been going to such institutions and are used primarily in the health education programs. This matter was discussed with the Executive Committee of our Society and I was requested to write to you and see if plans could be worked out on a statewide basis to furnish copies of Today's Health to all our colleges.

"It was the feeling of the members of the Executive Committee," that is of Forsyth County, "that this publication would be worth while and that it should not be left to the local medical society since some would have to furnish a large number which might be a financial burden or even financially impossible and that it would be better to think in terms of the state as a whole rather than the individual counties.

"I would like to know your reaction to this in order that I can pass it on to our society."

I couldn't act on that because it involves all the colleges in North Carolina and Today's Health.

PRESIDENT RHODES: This is a proposal that the Council consider that the State Medical Society consider subscribing to Today's Health for all of the colleges in North Carolina.

DR. BEDDINGFIELD: Mr. Chairman, I move this be referred to the Committee on Public Relations, because they have handled gift subscriptions to Today's Health in the past and they can see how this would fit into their budget and their distribution of Today's Health.

DR. KERNODLE: I second the motion.

PRESIDENT RHODES: Is there discussion of the motion?

(No response.)

If not, so many as favor it will say "aye."

The motion carried.

Now, I have one thing I want to say to you.

I want to tell you how grateful I am to all of you for your patience and your understanding and your honor you have done me to allow me to preside over this Council this year.

Thank you.

(Applause.)

(The meeting adjourned at seven-fifty o'clock p.m.)

MEETINGS OF THE HOUSE OF DELEGATES

MEDCIAL SOCIETY OF THE STATE OF NORTH CAROLINA HOUSE OF DELEGATES

SUNDAY AFTERNOON SESSION May 3, 1964

The First Meeting of the Annual Meeting of the House of Delegates of the Medical Society of the State of North Carolina convened at two o'clock p.m. in the Greensboro War Memorial Coliseum, Stage Area, Greensboro, North Carolina, Dr. John C. Reece, Speaker of the House, presiding.

PRESIDENT RHODES: Members of the House of Delegates, it is my privilege at this time to convene this House of Delegates for this annual session.

I want to welcome all of you here and I will now present the Reverend Claud B. Bowen, Pastor of the First Baptist Church of Greensboro, who will give the invocation.

I will ask you to stand.

(The attendance arose.)

THE REVEREND CLAUD B. BOWEN: Rendered the invocation.

PRESIDENT RHODES: In order that we might proceed now with the business of this meeting, it is my real pleasure to present to you the Speaker of this House, Dr. John C. Reece of Morganton.

SPEAKER REECE: Mr. President, we have, as you see, a very long agenda this afternoon; so as we proceed we will request that you keep your remarks to the pertinent matters that are to be discussed.

We will now call for a report of the Committee on Credentials.

Dr. Wilkerson.

DR. CHARLES B. WILKERSON (Chairman, Committee on Credentials): Mr. Speaker, we have a hundred and eight registered.

SPEAKER REECE: Dr. Styron.

DR. CHARLES W. STYRON (Secretary): Mr. Speaker, this constitutes a quorum.

SPEAKER REECE: The Secretary informs us that there is a quorum present, therefore the House of Delegates in in session and is ready for the dispatch of business.

I would like to next recognize the student AMA delegates: from the University of North Carolina, Noel McDevitt, please stand; from Bowman Gray, Mr. Mark Howell, you are welcome; and from Duke University, Mr. William Strauss.

At the present time we do not have any distinguished guests to present. We may interrupt at various times and present them as they appear before the session.

I would next like to appoint Committees on the President's two messages, the committee to be composed of three:

Dr. Ed Bivens will serve as Chairman of this Committee, and Dr. Roger Morrison and Dr. Paul Deaton to serve on this Committee.

I will now recognize Dr. Ed Beddingfield.

DR. EDGAR T. BEDDINGFIELD, Jr.: Mr. Speaker, Mr. President, Fellow Members of the House of Delegates. It is a happy privilege for me to introduce the next speaker. The next speaker is the distinguished Congressman from the Second Congressional District of the State of North Carolina, a native of Edgecombe County, educated at the University, former State Legislator, active in many civic, philanthropic, worthwhile organizations, very active in church work.

He was first elected to the 83rd Congress from his District and has been re-elected to suceeding Congresses since then. In his work in the Congress he was Chairman of the Intergovernmental Relations Subcommittee of the House Committee on Government and his Committee has been extremely active in the past few weeks in an area which is closly related to our activities with hearings involving drug safety.

He is also a member of the Foreign Affairs Committee, Chairman of the Near East Subcommittee of the Foreign Affairs Committee.

As one of his constituents, as one of the group representing this organization that has frequently visited Washington, I want to thank him before this group for his friendliness and his courtesy to use on the occasion of those visits and I want to welcome him here to Greensboro this afternoon.

It is a privilege to present Congressman L. H. Fountain.

(Applause.)

(Congressman Fountain's address will have appeared in the *North Carolina Medical Journal.*)

SPEAKER REECE: Thank you, Congressman Fountain, for your inspiring message to us. You honor us with your presence and we hope that you can remain with us during the afternoon and evening and we will enjoy the fellowship with you.

At this time we will recognize our President, Dr. John Rhodes, for his message of stewardship during this year.

Dr. Rhodes.

PRESIDENT RHODES: Mr. Speaker, Congressman Fountain, Members of the House of Delegates and guests: I would like first to add to Ed Beddingfield's word of appreciation my own for the many courtesies that Congressman Fountain and other members of our congressional delegation have awarded us on our visits to Washington. We are real grateful to you, Congressman, and I want to

say also that your appearance here today is a personal compliment to me.

By virtue of the honor the Society has bestowed on me, it is my privilege and duty to give an accounting of my stewardship. It should be clearly understood at the outset that whatever challenges have been met and whatever milestones overtaken have been attained less by my own personal qualifications for this post than by the untiring and selfless support of the officers and members of this society whose objectives have been mediated through an energetic and apt administrative staff.

You will recall that John R. Kernodle, just a year ago, during the second session of this House announced the enactment by the General Assembly then in session of legislation to implement a program of medical assistance to the aged under the Kerr-Mills Law.

Medicine supported this legislation as a means to fill the last remaining consequential gap in meeting the costs in health care needs.

The Medical Society, along with representatives of pharmacy, dentistry, the hospitals and others, have met frequently during the past year with welfare officials in the interest of the implementation of this program.

There was a natural disappointment when, in January, the Board of Welfare announced its intent not to expand the MAA program but to utilize the available monies for the expansion of existing assistance programs.

By direction of the executive council, the Board of Welfare was requested to hold an open hearing at which Dr. Ed Beddingfield, Chairman of the Society's Legislative Committee, and the man most responsible for guiding the bill through the General Assembly, acted as spokesman for the Society.

Finally, after an opinion by the Attorney General, the Board of Welfare reversed its previous position only a very short few days ago and will proceed to implement the MAA program on July 1.

Assurances given me verbally and by phone over the past six weeks reminded me very much of the southern aphorism, "mean to, don't pick no cotton."

Under the direction of the Society's Committee on Child Health and Poliomyelitis a county option campaign for immunization has been either initiated or completed in 80 counties, covering an estimated 2,700,000 persons. At least 12 additional counties proposed campaigns in the fall consummating virtually the total coverage of the state with Sabin oral vaccine and the abolition of this dread disease.

The Committee on Chronic Illness has continued and expanded its activities in the area of home care for patients and long-term medical care. It has maintained liaison with the Advisory Council of the Board of Health's Nursing Home Section, assisting in the development of rules and regulations for nursing homes recently adopted by the Board of Health.

It has collaborated in the study in Durham, Vance and Franklin counties by the Duke Department of Physical Medicine and Rehabilitation, and the Committee on Public Relations has continued support of Science Fairs.

It endorsed and gave support to the Durham-Orange Health Fair, the first of its kind in North Carolina, and, indeed, in this area, designed to stimulate interests among young people and provide information about the health professions and allied vocations.

Attendance at the Conference for Medical Society Officers in Pinehurst in January surpassed any previous turnout. The program was of superior quality and featured a panel of businessmen discussing "Medicine and the Free Enterprise System."

This Committee has developed an information booklet for physicians, an invaluable aid to the young physicians launching a practice and worthy of the scrutiny of all of us.

The major problem confronting the citizens of North Carolina is the tragic toll exacted by highway fatalities presently occurring at a greater rate than at any previous time. The Traffic Safety Committee, liaison to the highway patrol, has collaborated with the patrol in: one, setting up standards of physical fitness for highway safety; two, a study of factors leading to death and injury on the highways; and, three, the formation of teams of physicians to review qualifications of license applicants. A team consisting of five physicians in each of six patrol districts has been organized. In questioned cases the report of examination by the applicant's personal physician will be referred anonymously to the appropriate team for review and recommendation.

This is an important step toward the solution of the problem of licensee qualifications.

The Committees on Arrangements, Scientific Exhibits and Scientific Works are responsible for staging this annual meeting, which we believe you will find worthy of commendation.

Activities of the Mental Health Committee have been reorganized and greatly expanded to develop medical leadership at the community level to guide and direct the growth of community-oriented mental health facilities under the reorganized State Department of Mental Health authorized by action of the last General Assembly.

Maintenance of the integrity of the individual patient and preservation of the prerogative of the physician to exercise his own judgment is essential and imperative.

These references represent only a limited note of the activities of the 50 committees of this Society. Time does not permit a complete review of the committees' accomplishments.

The Legislative Committee during the General Assembly, under the guidance of Mr. James T. Barnes and Mr. John Anderson, Legal Counsel, deserves special commendation for the success of its efforts.

In view of the continued threat of federal legislation to impose some system of compulsory tax-supported health benefits, the Society has maintained close contact with the North Carolina delegation in the Congress. We are of the opinion that, without exception, the members of the Congressional delegation from this state are sympathetic to medicine's point of view.

On two occasions the officers and members of the Legislative Committee have made a group visit to Washington with personal contacts with Congressmen and with Senators.

There are some members of our Society who have received national recognition. The first of these I would recognize is Dr. Amos Johnson, Past President of this Society, who is the President-Elect of the American Academy of General Practice.

Dr. George W. Paschal, Jr., has been appointed a member of the Council on National Security of the Committee on Disaster and Medical Care.

Dr. Thomas D. Kinney, of Durham, is a member of the Committee on Blood of the AMA.

Dr. Elias Faison, a member of our delegation to the AMA, is a member of the Committee on Nursing of the AMA.

Dr. Stewart W. Lippincott is Chairman of the Committee on Nuclear Medicine of the AMA.

Dr. Wyan W. Washburn is Chairman of the Council on Rural Health.

Dr. John C. Reece is a member of the Commission on the Cost of Medical Care.

Dr. John R. Kernodle is a member of AmPac Board of Trustees.

These members of our Society have attained some eminence and are now recognized by either the AMA or some national organization.

One of the tragedies that has occurred to our medical society and a real loss to medicine in North Carolina and even in the nation was the death of Dr. Wingate Memory Johnson in September 1963. Dr. Johnson was the founder and the first Editor until the time of his death of our *Medical Journal.*

I would like to report to you that the Editorial Board of the *Journal* has elevated Dr. Robert W. Prichard to the post of Editor. Dr. Prichard has been associated for a number of years with Dr. Johnson as an Associate Editor and since Dr. Johnson's death has been Acting Editor of the *Journal.*

In addition, the Editorial Board has recommended that an appropriate tribute be given to Dr. Johnson by establishing his name on the masthead of the *Journal.*

At this time I would like to pay tribute to our Auxiliary, to Mrs. John Reece, its able president, and to commend them for the fine work they have done in support of the activities of this organization during the past year.

I might report to you that the medical society is in good financial condition, a matter which I will elaborate on at a later time during this meeting.

Finally, I would like to say to you that this Medical Society has the finest administrative staff it could hope to have, with a dedicated man at the head of the headquarters staff with some nine associates who spare neither time nor energy, much of it overtime and much of it beyond the call of duty, in the service of this organization.

I would also comment at this point that the time may have come when the Medical Society should give further thought to the construction of a headquarters office. I believe that that project fell by the wayside some years ago because of the death of Dr. William Coppridge and since that time little thought has been directed toward the development of a headquarters facility, but I believe the activities of the Society have expanded to the point where such a facility is a need.

Now, I would like to say to all of you that it has been a high honor for me to have this post during this past year. I have failed in many instances and, as I have pointed out in the beginning of this discussion, whatever has been accomplished has been a cooperative effort and not due to any one individual.

I thank you.

(Applause.)

SPEAKER REECE: You have heard the message of our President. It will be referred to the committee for review and recommendations to the Second Session of the Houes of Delegates. This committee will also review the second message of the president which will be presented to the general session.

We now proceed with the reports.

The report of the Constitutional Secretary, Dr. Styron.

DR. CHARLES W. STYRON (Constitutional Secretary): Mr. Chairman the enrolled membership, December 1963, was 3,429 members, representing an increase for the year of 76 members. The society has had an active and progressive year under the leadership of the Immediate Past President, Dr. John R. Kernodle, and the President, Dr. John Rhodes.

There have been outstanding accomplishments in the legislative area in mental health, the details of which are embodied in the 1964 Compilation of Annual Reports.

The reports of the various committees included in this annual report are illustrative of the energy and the talent given to the activity of the Society

by its various members. The committee members are congratulated on the excellent work done for the society and for fellow members in the past year.

The society mourned the loss of a former president and the first and only Editor of the *Journal*, Wingate Johnson. The society has been fortunate to have a member with such great talents working in its behalf for many years.

The headquarters office under the leadership of the Executive Director, James T. Barnes, has functioned efficiently and well and in a fiscally sound manner. The Executive Director and his staff are to be commended on the outstanding service rendered to this society.

SPEAKER REECE: You have heard the report of the Constitutional Secretary. What is your pleasure?

A MEMBER: I move it be accepted.

(The motion was seconded.)

SPEAKER REECE: All in favor say "aye."

(A chorus of "ayes.")

Ordered, accepted.

The Executive Director, Mr. James T. Barnes.

MR. JAMES T. BARNES (Executive Director): President Rhodes, Speaker Reece, members of the House of Delegates. You have the report in the Compilation of the Executive Director. I believe I have nothing to add generally to that.

There is a report of the audit for 1963 in the front of your Compilation which gives sufficient detail, we believe, of the fiscal affairs of the society for the past year and President Rhodes will comment on that in the course of his report for the Executive Council.

We sense that the Society is a growing body. We have on the rolls during the year more than 3,500 members, we had some attritions, a marked necrology for the year, and a marked gaining of new membership.

So far as we know the loyalty of the profession to this organization is high and relatively small numbers do not have membership in the society.

We are still maintaining our level of four delegates to the American Medical Association by reason of what I regard as the substantial job of handling the membership problem, the dues and so forth, for the National Association.

I am submitting my report and the audit report with the recommendation that it have your consideration.

Thank you.

SPEAKER REECE: You have heard the report of the Executive Director, which is also published in the Compilation.

What is the pleasure of the House? Do I hear a motion that it be adopted?

A MEMBER: I so move.

SPEAKER REECE: Second?

(The motion was seconded and, upon vote, carried.)

SPEAKER REECE: The report of the Assistant Executive Secretary, Mr. William Hilliard.

MR. WILLIAM HILLIARD (Assistant Executive Secretary): Nothing further the printed report as appears on page 9 of the Compilation.

SPEAKER REECE: What is the pleasure of the House concerning this? Do I hear a motion that it be accepted.

A MEMBER: I so move.

(The motion was seconded and, upon vote, carried.)

SPEAKER REECE: Educational Consultant, Miss Kay Zeigler.

MISS KAY ZEIGLER (Education Consultant): I have nothing further to add.

SPEAKER REECE: What is the pleasure of the House concerning this?

A MEMBER: I move it be accepted.

(The motion was seconded and, upon vote, carried.)

SPEAKER REECE: Since I have some special relationship to the President of the Auxiliary, I am going to exercise the authority of the Chair and escort the President of the Medical Auxiliary of the State of North Carolina for her report.

(The President of the State of North Carolina Medical Auxiliary was escorted to the podium: attendance standing: Applause.)

(Mrs. John C. Reece then presented the report of the Auxiliary printed on page 12 of the 1964 Compilation.)

(Applause.)

SPEAKER REECE: Thank you Madam President.

As you see, the Reece boys have really been on their own this year, and we will welcome you back at home to take care of us.

You have heard the report of the Medical Auxiliary, what is your desire with this report.

A MEMBER: I move its acceptance.

(The motion was seconded and, upon vote, carried.)

SPEAKER REECE: The next item is the appointments of the Reference Committees.

I will ask that the Chairman of each Commission serve as the Chairman of a Reference Committee in case certain resolutions would be presented to the House for their consideration and for a later study and report to the House.

The Parliamentarian for this session will be Dr. George Paschal.

We will now proceed with the Report of the Councilors for the various councilor districts.

The First District, Dr. Brinn.

DR. T. P. BRINN (First District Councilor): No further report.

SPEAKER REECE: Second District, Dr. Williams.

DR. LYNWOOD E. WILLIAMS (Second District

Counciler): Mr. Speaker I believe we have a matter of unfinished business with regard to hyphenated Craven-Pamlico Medical Society.

SPEAKER REECE: That will be reported in the President's Report on the Executive Council.

DR. WILLIAMS: We will take it up at that time.

SPEAKER REECE: Yes.

DR. WILLIAMS: Then I have no further report.

SPEAKER REECE: The Third District, Dr. Bridger.

DR. DEWEY H. BRIDGER (Third District Councilor): No further report.

SPEAKER REECE: The Fourth District, Dr. Beddingfield.

DR. EDGAR T. BEDDINGFIELD, JR. (Fourth District Councilor)): No further report.

SPEAKER REECE: Fifth District, Dr. Garrison.

DR. RALPH B. GARRISON (Fifth District Councilor): No further report.

SPEAKER REECE: Sixth District, Dr. Paschal.

DR. GEORGE W. PASCHAL, JR. (Sixth District Councilor): No further report.

SPEAKER REECE: Seventh District, Dr. Bivens.

DR. EDWARD S. BIVENS (Seventh District Councilor): No further report.

SPEAKER REECE: Eighth District, Dr. Johnson.

DR. HARRY L. JOHNSON (Eighth District Councilor): No further report.

SPEAKER REECE: Ninth District, Dr. Lynch Murphy.

DR. T. LYNCH MURPHY (Ninth District Councilor): No further report.

SPEAKER REECE: The Tenth District, Dr. Sams.

(No response.)

These reports are published in the Compilation.

What is the desire of the House concerning these reports? If it is in order, we will accept them all together.

A MEMBER: I move they be accepted, as published.

(The motion was seconded.)

The motion has been made and seconded that they be accepted as published.

(Upon vote the motion carried.)

Report of Delegates to the American Medical Association.

DR. ELIAS FAISON (Charlotte, North Carolina): No further report.

SPEAKER REECE: Dr. Amos Johnson.

DR. AMOS N. JOHNSON (Garland, North Carolina): No additional report.

SPEAKER REECE: Dr. Millard D. Hill.

DR. MILLARD D. HILL: Nothing further.

SPEAKER REECE: Dr. Badie T. Clark.

DR. BADIE T. CLARK (Wilson, North Carolina): No further report.

SPEAKER REECE: What is the desire of the House concerning these reports as published in the Compilation?

A MEMBER: I move their acceptance.

(The motion was seconded and, on vote, carried.)

SPEAKER REECE: Report of Related Organizations:

North Carolina Board of Medical Examiners, Dr. J. J. Combs.

(No response.)

Hospital Saving Association, Dr. Hedgpeth.

(No response.)

Hospital Care Association, Dr. Street Brewer.

(No response.)

Medical Care Commission.

(No response.)

Medical Education Research Foundation.

(No response.)

I do believe that we may have some other reports that may come from the Committee on Constitution and By-Laws, so we will act on those first five as published.

What is the desire of the House concerning these reports?

A MEMBER: I move they be approved.

SPEAKER REECE: Second?

(The motion was seconded and, upon vote, carried.)

SPEAKER REECE: I now recognize Dr. Roscoe McMillan for the further Report of the Committee on Constitution and By-Laws.

Dr. McMillan.

DR. ROSCOE D. McMILLAN (Chairman on Constitution and By-Laws): Mr. Speaker, Mr. President, Members of the House of Delegates. Your Committee on Constitution and By-Laws met on two occasions during the year, during the Conclave of Committee-Commissioner Conferences in Mid Pines in September 1963 and again on April 10, 1964, in Pinehurst. Several important matters of referral had been considered and resolved into recommendations to the House of Delegates which are read as follows:

First, Amend Article VIII, Section 3, line 9 by striking out the phrase:

"who is not in attendance upon the annual meeting and"

and in lines 16 and 17 the words:

"including the meeting at which he is nominated."

I will explain:

This amendment is made essential due to the secrecy of the Nominating Committee's sealed report of nominations to the President, whereas those nominated therein will scarcely have knowledge they are nominated for election and may or they may not be at the annual meeting at which they

are elected, as required in the present Constitution and By-Laws.

That is an amendment to the Constitution and it does not require a motion. I have to bring it to you to be voted on next year.

DR. McMILLAN: Agenda Item 2, Amend Chapter II, Section 1 of the By-Laws by adding a new sentence at the end of the Section to read as follows:

"The Executive Council shall recommend to the House of Delegates a time and place for the holding of each Annual Meeting of the Society."

The current situation on this is that the accommodations of various communities and situations for accommodating meetings is such that the Committee on Arrangements has become increasingly involved in the details of arrangements and these require multiple negotiations of longer periods of time in cooperation with the staff; whereas the Nominating Committee meets rarely and in more or less executive sessions making the function difficult for it to carry out. Therefore, the Executive Council appears the logical group to study and to make recommendations to the House of Delegates. This in no way lessens the District representation in the development of recommendations.

Mr. Speaker, I move the adoption of this amendment.

(The motion was seconded and, on vote, carried.)

CHAIRMAN McMILLAN: Agenda Item 3, Amend Chapter IV, Section 2, of the By-Laws by striking out the second sentence in line 9 of the Section and inserting in lieu thereof the following new sentence:

"In the case of component societies composed of members from more than one county, the delegates shall be apportioned to each county in accordance with the number of members residing in each county, and each composing county shall be entitled to at least one delegate who shall be a member residing in that county, except as otherwise hereinafter provided."

This avoids disfranchising the ratio of awardable delegates for any county jurisdiction where the membership is sufficient to be awarded 1 or more delegates in that particular county jurisdiction.

Mr. Speaker, I move the adoption of this amendment.

(The motion was seconded and, on vote, carried.)

CHAIRMAN McMILLAN: Agenda Item 4. First, Amend Chapter V, Section 3 by striking the period after the word "Council" and adding the phrase:

"at which time the function of such Nominating Committee shall cease."

The explanation for that is this (existing section) does not clarify the termination of a nominating committee at the time of a floor disclosure of its report at which the House of Delegates acts on the report and at the same time and place creates a new nominating committee. There should be no overlapping time during which a nominating committee exists or functions.

Mr. Speaker, I move the adoption of this amendment.

SPEAKER REECE: Do I hear a second?

(The motion was seconded and, upon vote, carried.)

CHAIRMAN McMILLAN: A little further explanation:

The opinion of the Committee on Constitution and By-Laws is that since Dr. William F. Hollister did not hold an office in the Society on May 3, 1963 at the time he was elected as a member of the Nominating Committee he was then eligible to be a member of the Nominating Committee.

Moreover, it is the opinion of the Committee on Constitution and By-Laws that Dr. H. Fleming Fuller was an officer of the Society on May 5, 1963 at the time members of the new Nominating Committee were elected by the House of Delegates and that he was not, therefore, eligible for election as a member of the Nominating Committee; that, therefore by reason of his ineligibility a vacancy did exist on the Nominating Committee at the close of the 1963 House of Delegates meeting and that said vacancy was properly filled by later action of the Executive Council at a time when Dr. Fuller no longer endured an impediment to a position on the Nominating Committee as expressly desired by the Second Medical District from which he was a member.

I would state further that Dr. Fuller resigned and was again elected to his position after he found out he was not eligible. So that cleared that up.

But this will eliminate in the future just such circumstances as what occurred last year.

Agenda Item 5, Chapter V, Section 2:

First, by inserting a sentence in line 4, following the word "district," to read as follows:

"the President-Elect shall be an ex officio nonvoting member of the Nominating Committee."

I move the adoption of this amendment, Mr. Speaker, which simply accesses the President-Elect to consultation in the work of the Nominating Committee relative to choosing vice-presidential material to work with the president during his term as president which is yet to accrue to him.

In other words, he is a member of this Nominating Committee, he has no vote, but still he is in on what is going on, because he is the man who has got to carry on the following year.

I move the adoption of this amendment.

SPEAKER REECE: Do we have a second?

(The motion was seconded and, upon vote, carried.)

CHAIRMAN McMILLAN: Third. Amend Chapter V, Section 2 at line 36 by the insertion of a

period after the word "Constitution"; then by inserting a new sentence to read:

"the nominations for the ten (district) Councilors, the ten (district) Vice-Councilors, and the Secretary shall be made each third year;" and thereby deleting the remainder of Section Two which now reads: "and the Members of the State Board of Health as provided in Article IX, Section Two."

I will explain this change.

This change, Mr. Speaker and Members of the House of Delegates, moves the election of the members of the State Board of Health from the Section on society officers elections, which Board of Health members are not, to the duties of the Nominating Committee which has the function of nominating candidates for election to State Board of Health member tenures of office.

I move, Mr. Speaker, the adoption of this amendment.

SPEAKER REECE: You have heard the motion. Second?

(The motion was seconded and, upon vote, carried.)

CHAIRMAN McMILLAN:

Amend Chaper V, Section 2, by inserting in line 4, between the word "no" and the word "member" the word "other"; so the first phrase of the sentence will read:

"No other member of this Committee . . ."

I move the adoption of this amendment, Mr. Speaker, which merely accommodates the correctness of the first amendment of Chapter V, Section 2.

SPEAKER REECE: Second?

(The motion was seconded and, on vote, carried.)

CHAIRMAN McMILLAN: Amend Chapter VI, Section 2 by striking out the period at the end of the second sentence of said Section and add to the said sentence the following phrase:

"and a non-voting member of the Committee on Nominations."

I move the adoption of this amendment, Mr. Speaker.

(The motion was seconded and, on vote, carried.)

CHAIRMAN McMILLAN: Fourth, Amend Section 2, as firstly, secondly, and thirdly amended above by the insertion of a parenthetical direction:

"(See Chapter X, Section 4.)"

I move the adoption of this amendment, which simply directs attention to the duties of the Committee on Nominations to be stated in one single place in the By-Laws instead of a duplication.

I move the adoption of this amendment.

(The motion was seconded and, on vote. carried.)

CHAIRMAN McMILLAN: Agenda Item 7, amend Chapter X, Section 4, first in line 2, by deleting the word "appointed" and insert the word "elected".

I move the adoption of this amendment, Mr. Speaker.

(The motion was seconded and, on vote, carried.)

CHAIRMAN McMILLAN: Secondly, amend Chapter X, Section 4, line 4, after the word "nominate" by inserting the phrase, "members of the State Board of Health as provided in Article IX, Section 2,".

This amendment simply brings into citation to the Nominating Committee this duty which it heretofore had, but expresses it in one place where the duties of the Committee are cited.

I move the adoption of this amendment, Mr. Speaker.

(The motion was seconded and, on vote, carried.)

CHAIRMAN McMILLAN: Thirdly, amend Chapter X, Section 4, by deleting the last sentence, which begins:

"they shall also . . .".

You will note that in Item 5 of this report, amending Chapter V, Section 2, at line 36 does provide for the election every third year of the several Councilors, several Vice-Councilors and the Secretary.

I move the adoption of this amendment.

(The motion was seconded and, on vote, carried.)

CHAIRMAN McMILLAN: Mr. Speaker this concludes the consolidated report of the Committee on Constitution and By-Laws as developed at meetings September 26, 1963 and April 10, 1964, both of which have been reported to the Executive Council and brought to the House of Delegates for action with the recommendations of the Executive Council.

Respectfully submitted.

SPEAKER REECE: Do I hear a motion that we approve this report as a whole.

A MEMBER: I so move.

SPEAKER REECE: Second?

(The motion was seconded.)

All in favor say "aye."

(A chorus of "ayes.")

Opposed no.

(No response.)

The motion is carried.

Our report now for the Commissions.

Administration Commission, Dr. Benton.

DR. WAYNE J. BENTON (Chairman, Administration Commission): No further report.

SPEAKER REECE: Advisory and Study Commission, Dr. Poteat.

DR. HUBERT POTEAT, JR. (Advisory and Study Commission): No further report.

SPEAKER REECE: Annual Convention Commission, Dr. Leonard Goldner.

(No response.)

Professional Service Commission, Dr. Paschal.

DR. GEORGE W. PASCHAL, JR. (Professional Service Commission): No further report, Mr. Speaker.

SPEAKER REECE: Public Relations Commission, Dr. Flemming Fuller.

(No response.)

Public Service Commission, Dr. Tom Thurston.

(No response.)

I wish to act on these six right here. Do I have a recommendation of the pleasure of the House concerning these printed reports?

A MEMBER: I move they be approved.

(The motion was seconded.)

SPEAKER REECE: All in favor say "aye."

(A chorus of "ayes.")

Opposed no.

(No response.)

Motion carried.

At the present time Dr. Rhodes asked that we defer his report for a few minutes.

Now, under section "(b) (under) Agenda Item 7, nominations from the floor and election of trustees for the Hospital Saving Association, to succeed Dr. Klostermyer.

Do we have any report concerning that? Nominations from the floor.

A MEMBER: Mr. Speaker, it is a very, very important mission and why would it not be in order to move that Dr. Klostermyer succeed himself.

SPEAKER REECE: You make that as a motion?

SAME MEMBER: I make that as a motion.

DR. T. S. RAIFORD: I will second the motion.

SPEAKER REECE: Any further nominations?

A MEMBER: I move the nominations be closed.

(The motion was seconded.)

SPEAKER REECE: The motion has also been made that the nominations be closed and Dr. Klostermyer be elected by acclamation.

All in favor say "aye."

(A chorus of "ayes.")

Opposed no.

(No response.)

It is so ordered.

Hospital Care Association, to succeed Dr. Hamilton.

DR. KOONCE: I would like to nominate Dr. Alfred Hamilton.

SPEAKER REECE: Dr. Alfred Hamilton has been nominated to succeed himself on the Hospital Care Association.

(The motion was seconded.)

It has been seconded.

A MEMBER: I move the nominations be closed.

(The motion was seconded.)

SPEAKER REECE: The motion has been made that nominations be closed and that Dr. Hamilton be accepted by acclamation.

All in favor say "aye."

(A chorus of ayes.")

Opposed no.

(No response.) The motion carried.

Retirement Savings Plan Committee, Dr. Faison and Dr. Rose term expires.

A MEMBER: Mr. Speaker, I wish to nominate for re-election to this committee Dr. Elias Faison and Hewitt Rose, I wish to nominate them and make the motion that they be elected by acclamation.

(The motion was seconded.)

SPEAKER REECE: The motion has been made and seconded that Dr. Faison and Dr. Rose be elected by acclamation.

All in favor say "aye."

(A chorus of "ayes.")

Opposed no.

(No response.)

It is carried.

The Committee on Grievances, any further report, Dr. Baker?

DR. LENOX D. BAKER (Chairman, Committee on Grievances: No further report. Very happy to be here.

SPEAKER REECE: Number 9, The Committee on Negotiations, Dr. Hollister.

DR. WILLIAM F. HOLLISTER (Chairman, Committee on Negotiations): No report, Mr. Chairman.

SPEAKER REECE: No additional report.

We now come to item number 10, the report of the executive council to be submitted by the President, Dr. Rhodes.

PRESIDENT RHODES: Mr. Speaker, as the presiding officer of the Executive Council, it is my duty now to bring to you a report from the Council.

May I say that the Council has convened on three occasions during the past year, in September, in January and in May. The minutes of the two prior meetings are recorded in your compilation. This is an abridgement of the minutes. The large volumes are available, and I would make a motion that these minutes be approved as presented in the compilation.

SPEAKER REECE: You have heard the recommendation of the President that they be adopted as included in the compilation. Do I hear a second to this?

(The motion was seconded.)

All in favor say "aye."

(Chorus of "ayes.")

Opposed no.

(No response.)

It is carried.

PRESIDENT RHODES: It is also my duty to present to you the budget for the year 1964, January 1, 1964 through December 31, 1964.

I would remind you that the 1963 budget at the

beginning of the year had a projected deficit of $22,000. This was related to some funds expected at the time from a state-wide polio campaign which was abandoned subsequent to the adoption of the budget in the fall of 1962.

I would like now to present to you the budget for this year adopted in September of 1963.

You will note the receipts expected $250,000 with an expected expenditure of $243,000, or an expected surplus of $7,900 in round figures.

I would refer back now to this budget of last year and suggest that as a result of very astute and careful action on the part of our Treasurer that $22,000 deficit became only actually a $900 deficit. Part of that might be considered as income from investment. There was some $6,000 of income from the invested funds, which reduced an actual deficit of a little more than $7000, to about $900 and that, I think, is a real commendation to the careful handling and management of our Treasurer.

I would present now the budget for 1964 for your adoption. I move its adoption.

(The motion was seconded.)

SPEAKER REECE: All in favor say "aye."

(A chorus of "ayes.")

Opposed no.

(No response.)

The motion carried.

PRESIDENT RHODES: Now it is my duty to bring to you the actions of the Executive Council yesterday.

The first of these is a recommendation to the House of Delegates that it approve the hyphenation of the Pamlico and Craven County Societies as one component medical society.

This will require an amendment to the section of the By-Laws, Chapter VII, Section 1.

I move the approval of this recommendation.

SPEAKER REECE: Do I hear a second?

(The motion was seconded.)

All in favor say "aye."

(Chorus of "ayes.")

Opposed no.

(No response.)

The motion carried.

PRESIDENT RHODES: I would like now to present certain resolutions, all of which have been approved and referred to this Council for action.

The first of these comes from the Committee on Venereal Disease.

WHEREAS, the number of cases of infectious syphillis has increased steadily during each of the past six years to a presently estimated incidence (U. S.) of 100,000, and of gonorrhea to one million, and

WHEREAS, a recent national study indicates that three-fourths of all infected persons are treated by physicians in private practice;

THEREFORE, the Medical Society of the State of North Carolina recommends that the Delegate Body here assembled take official cognizance of the resurgence of syphillis and gonorrhea to the proportions of a national health problem; that it initiate, through appropriate channels a comprehensive inquiry of the causative factors for this sharp increase in diseases for which a simple cure is now available; that it take leadership in educational and research measures designed to control and eliminate syphillis; and that it provide guidance to private physicians in the epidemiology of the venereal diseases and of their social implications.

SPEAKER REECE: This will be referred to the appropriate Reference Committee and reported back to the House at the recessed session.

PRESIDENT RHODES: The second of these resolutions comes from the Committee of Child Health and was stimulated by a letter from the North Carolina Dental Society.

WHEREAS, the school health program carried on by the School Health Coordinating Service for the past fifteen years has not recently been subjected to careful study and evaluation and

WHEREAS, there may be increased opportunities for coordinating this program with other child health services of other agencies and

WHEREAS, the health of school children is closely related to the needs of poverty stricken people, and

WHEREAS, the health problems of the school children may be a primary cause of dropout and

WHEREAS, both State and Federal Governments have in recent years considerably increased attention and support to certain areas of child health which were not a part of the original school health coordinating service plan;

THEREFORE, Be it resolved, that the Governor of North Carolina be requested to appoint a Commission for the purpose of making a study of the entire area of the health needs of the school age child with the objective of making recommendations to the Governor which will result in the general improvement of these services, the elimination of duplications of service and increased coordination of these services with other child health services and which will take full advantage of the more recent knowledge, facilities and opportunities for health services to children of school age.

The suggested Commission should be three physicians from the Medical Society of the State of North Carolina, three dentists, one representative of the State Board of Health, one representative of the Department of Public Instruction, one representative of the P.T.A., Legislative representatives, Health Directors representative of Health Directors, and a representative of the local school superintendent.

SPEAKER REECE: This will be referred to the Reference Committee on School Health.

PRESIDENT RHODES: The third resolution comes from the Lenoir-Greene-Jones County Medical Society and reads as follows:

It is a request to the AMA Judicial Council.

WHEREAS, the ethical and legal limitations of physicians participating in court ordered pretrial psychiatric examinations have not been clarified;

THEREFORE, Be it resolved that the House of Delegates of the North Carolina Medical Society requests the House of Delegates of the American Medical Association to ask the AMA Judicial Council to rule on the ethical and legal limitations of the physician participating in court ordered pretrial psychiatric examinations when the accused or his legal representative have not requested it.

SPEAKER REECE: The Secretary tells me that he wants these to be approved now, since they will not go to the reference committees.

PRESIDENT RHODES: Oh, I see, I was under the impression they would be referred.

Let me read the fourth one, then.

The fourth of these resolutions was developed as a result of request of the American Medical Association and goes to the Congressional Representatives of North Carolina.

WHEREAS, self-employed and professionals representing a substantial segment of the citizenry and the production capacity of this nation have been discriminated against in partnership form in the design and administration of federal tax laws relative to lawful permission to save for retirement, and

WHEREAS, the Congress by enacting the Keogh-Smathers Bill in the 87th Session, did recognize the unequal treatment of self-employed individuals, and

WHEREAS, by Administrative interpretation and regulation and by inter-agency action the self-employed individual's Tax Retirement Act of 1962 has been scuttled as a means of relief to said group of self-employed and professional citizens and producers, and

WHEREAS, the Federal Treasury Department through the administration of the Internal Revenue Service is now considering the promulgation of amending rules on the previously promulgated Kintner regulations in a manner to severely discriminate against professional citizens who have established the form of professional corporation or association.

NOW, THEREFORE, BE IT RESOLVED, by the Medical Society of the State of North Carolina that it adopt the following statements:

One: It favors HR-9217 and Senate Bill 2403 introduced into the 88th Congress and does urge the passage by Congress of these proposals as a means of amending Section 7701 of the Internal Revenue Code designed to clarify the status of professional associations and corporations established under state law for federal income tax purposes.

Two: Favors Congress passing HR-8771 and S-2229 to amend the Internal Revenue Code of 1954 to authorize pension and profit sharing plans which provide contributions and benefits equitably for and without discrimination against self-employed individuals and without proscribed limitations on the amounts of such contributions.

Three: It urges Congress to consider for adoption such reasonable alternatives to the above legislative proposals so long as the enactments would provide equitable retirement benefits to the self-employed as are now enjoyed by other tax payers and citizens.

Four: It rejects as unreasonable, arbitrary and unfair the proposed administrative amendment to the Kintner regulations because it would represent a change in regulations of long standing and because to do so would constitute a capricious action without the authority of Congress.

Five: It recognizes earlier regulations as having been more reasonable, fair and altogether based on principles established by the Supreme Court of the United States and which, in effect, had been approved by the Congress by long-standing cognizance.

Six: It urges professionals and self-employed, wherever organized and individually to take action similar to these resolutions and to convey such expressions to the Congress immediately.

Seven: It urges the eleven representatives and the two Senators from North Carolina to give their individual support to the enactment of legislation to accomplish the purposes as set forth above by the recommendation of the Executive Council by the authority of the House of Delegates of the Medical Society of the State of North Carolina this third day of May 1964.

The Council approved the activities of the Committee of Traffic Safety liaison to the Highway Safety, Highway Patrol, establishing five member physician committees and six highway patrol districts to review qualifications of questionable applicants for drivers licenses.

I do not believe that requires any action. That is a report of a committee action.

Consideration by the Council was given to the possibility of central billing for county, state and AMA Medical Society dues. This matter was referred to the Committee on Finance for further consideration.

The reason for that is because of an effort to arrive at some sort of simplification for the collection and distribution of dues.

As you know, the office has considerable difficulty now in getting these dues. They dribble in and we are looking for some way to do this by IBM machinery.

This is by way of a report. The State Board of Higher Education has undertaken a survey of the

needs in nursing in North Carolina as part of their program. This revovles around the nurse training schools for accreditation and relates to programs of affiliate and associate training programs, particularly in connection with the developing community colleges.

I will ask that Dr. George Paschal if he would like to elaborate on that report because he has been representing the Medical Society at the meetings of the State Board of Higher Education.

Dr. Paschal, would you mind elaborating on this? I think this is an important thing because this is an important area in nursing.

DR. GEORGE W. PASCHAL: Mr. President, this does represent the action that has been proposed and does represent a departure from the usual procedure of nursing education in North Carolina. What has been proposed so far and is so far only in the form of a recommendation and I have had no official word to the effect that these recommendations have been followed.

I have every reason to believe, however, that the State Board of Higher Education and the State Board of Education, and Medical Care Commission will comply and follow the recommendations that have been made.

The main purpose of these recommendations is to provide more adequate nursing care for the people of North Carolina.

Finally, it has been considered that there will be different levels of nursing education. It is felt that the proposed plan will provide additional nursing personnel to meet the demand much more quickly.

The problem of the licensed practical nurse was not brought under consideration but it is expected that this will be continued as it is now in operation. The fact that it has been successful in its operation is one reason that the committee recommended the adoption of these additional programs.

It is hoped that all hospitals which now participate in nursing education, including some 20 that are lacking in accreditation, and also including those six in the state which are now accredited will continue their programs toward the diploma, in the diploma schools.

In addition to this, it is proposed that the associate degree program be instituted in the two-year community colleges and, in some instances, in four-year schools, such as is now being done here at the Women's College in Greensboro.

In addition to these associate degree programs, there will be a baccalaureate degree program established at some of the four-year schools. As you know, there are several of these in existence at the present time.

The thing that brought this matter to a head was the application of Charlotte College and Wilmington College for permission to establish schools (of nursing). The Charlotte College wanted to establish a school of a baccalaureate degree program, the Wilmington College, even though it was a four-year school, wanted to establish and put into operation an associate degree program. They had to have the approval of the State Board of Higher Education before this could be done.

It was recommended that both of these applications be approved. This was done with the approval and blessing of the National League for Nursing and the American Nursing Association, even though they recognized that it was not a desirable thing in most instances to have a four-year school carry on a 2-year program.

I think this will alter the whole mechanism of nursing education in North Carolina and it will put the responsibility and the financial support of such an education under the operation of our state government.

It will, I fear, create a problem and make possible a situation in which the existing schools, the diploma schools, will find a way to discontinue their operation.

It is known that these are quite expensive, the hospitals lose money in their operation and a great many of them would like to discontinue them. I believe that this overall program, however, when put in operation will afford the state the opportunity to have the nurses that are necessary.

I think that covers briefly, John, what I have to say. If there are any questions, I will be glad to elaborate.

PRESIDENT RHODES: Thank you.

The Council passed a motion and recommends to the House of Delegates that the Society grant the MedPac of North Carolina $5,800 for educational purposes, with these monies to be kept in a separate fund and utilized only for educational purposes.

The Council also passed a motion and recommends for adoption that a committee be appointed by the President to investigate the possibilities of moving MedPac headquarters into Raleigh.

The Council also approved the passage of gastric tubes by qualified, trained personnel under the direction of the physician and directed the legal counsel to obtain an opinion from the Attorney General confirming this policy.

Finally, after a great deal of deliberation, and two meetings of the Council and with full recognition that this was not a unanimously adopted motion the Council passed the following motion:

* * *

(President Rhodes reporting on the action of the Council considered in session May 2, 1964.) (Reporting May 3, 1964.)

PRESIDENT RHODES: . . . And, finally, after a great deal of deliberation in two meetings of the Council, and with full recognition that this was not a unanimously adopted motion, the Council passed the following motion.

That this Council approve and ask the House of Delegates to further approve the change in our Constitution and By-Laws which will make it possible for any person who meets the specified requirements of membership to be granted such membership in the Society as an active member.

I think it is only fair for me to report to this House that the vote taken was 10 to 5 in favor of this motion with two members absent.

Mr. Speaker, I move the adoption of this report.

(The motion was seconded.)

SPEAKER REECE: You have heard the recommendation and the second. All in favor say "aye."

DR. BEDDINGFIELD: In view of the diversity of the recommendations of the Council, some relating to nursing, some to highway safety, some to school health programs and so forth, *I would move* that we vote on these things separately rather than adopt the report as a whole.

(The motion was seconded.)

SPEAKER REECE: The motion has been made and seconded that these be acted on separately.

All in favor say "aye."

(A chorus of "ayes.")

Opposed "no."

(No response.)

They will be acted on separately.

* * *

PRESIDENT RHODES: Finally, I will repeat very briefly what I said at the end of this report in the beginning.

After deliberation in two sessions of the council this matter was deferred in the January Meeting until the May Meeting and after further consideration the motion was made that the Council approve and ask the House of Delegates to further approve the change in our Constitution and By-Laws which will make it possible for any person who meets the specified requirements of membership to be granted such membership in the Society as an active member.

As I said before, I think it is fair, only fair that I report to you that the vote on this motion was 10 to 5 with two members absent.

SPEAKER REECE: Dr. Paschal.

DR. PASCHAL: I would like to speak to the Council's recommendation.

In order to implement the recommendation of the Executive Council and in compliance with the provisions of the Constitution and By-Laws, Article XIII regarding amendments, *I present the following specific amendments to the Constitution and By-Laws*:

These, I understand, require no action today (May 3, 1964) but are to be considered for final approval at the next Annual Meeting.

The amendments proposed are, as I will read them.

To amend Article IV of the Constitution and By-Laws by striking out the words "Scientific Members" in Section 1.

Two, by striking out the words "other than Scientific Members" in Section 2.

And, three, by striking out Section 8 entirely.

And to amend the By-Laws as follows:

By striking out the words "or Scientific Members" in Chapter I, Section 1 and inserting the word "or" between the comma and the word "affiliate".

Amend Chapter XII, Section 1, by striking out the words "and Scientific Members."

Amend Chapter XV by striking out the word "white" in line 5 of Section 5 and striking out the semicolon and the portion of the first sentence after the word "members" in line 7 and inserting a period after the word "members."

And, finally, by striking out the last or the remainder of that particular sentence.

I would like to confirm my impression that this is the only action necessary by asking Dr. McMillan, the Chairman of the Committee, if this is the appropriate interpretation.

SPEAKER REECE: Dr. McMillan.

DR. McMILLAN: Mr. President, Mr. Speaker, that's exactly right. I think Dr. Paschal is exactly right, he has only presented it today, no vote shall be taken. To substantiate what I have said, Article XIII on Amendments (reads): "The House of Delegates may amend any article of this Constitution by a two-thirds vote of the delegates registered at the Annual Meeting provided, first, that such amendment shall have been presented in open meeting at the previous Annual Meeting and it shall have been sent officially to each component county society or printed in an official publication of the Society at least two months before session at which final action is to be taken, or, two, that such amendment shall upon two-thirds vote of the House of Delegates be submitted to and approved by a general referendum as provided for in Article XI."

Does that clarify it?

SPEAKER REECE: The interpretation of this is that it is presented; no action is required at this time. The vote will be taken at the next annual session.

DR. CARR (Mecklenburg): Mr. Speaker, I rise to a point of order. Do I take it that Dr. Paschal has presented this as the first reading?

The point of inquiry is: Has Dr. Paschal presented his suggested Constitution and By-Laws in his discussion?

SPEAKER REECE: Dr. McMillan, would you clarify that?

DR. McMILLAN: Mr. Speaker, Dr. Paschal presented it, is my understanding.

SPEAKER REECE: Does that answer your question?

DR. CARR: It does, if Dr. Paschal agrees that

he has presented it.

DR. PASCHAL: Dr. Carr, I quote from my original statement, "in order to implement the recommendations of the Executive Council and in compliance with the provisions of the Article, I present the following specific amendments," et cetera.

This, I believe, constitutes the presentation of this and complies with the provisions of the Constitution and By-Laws.

SPEAKER REECE: The Chair interprets this as being presented officially to the House in an open session.

You have heard the report of the President from the Executive Council. Do I hear a motion that we accept this report as a whole?

(The motion was duly made and seconded.)

All in favor say "aye."

(A chorus of "ayes.")

No?

(No response.)

So the motion is carried.

I now recognize the President.

DR. AMOS JOHNSON: Let me clear something up in my mind. If you say accept the report of the President as amended or as altered, yes, we can vote for it, but if you just flatly accept the report of the President as it was reported by the President, then we have already taken action on this matter that we were just deferring until next year.

SPEAKER REECE: I stand corrected. The Report of the Executive Council by the President, as amended.

DR. AMOS JOHNSON: That is right.

SPEAKER REECE: Now, all in favor of the report as amended say "aye."

(A chorus of "ayes.")

Opposed "no."

(No response.)

* * *

SPEAKER REECE: I recognize Dr. Paschal.

DR. PASCHAL: Mr. Speaker, since there were a few things that were not officially approved by this group relating to the President's Report of the Executive Council activity, I would like to make the following motion.

I move that the Report of the Executive Council that was made last Sunday, and as then amended, be adopted and approved, except as to the recommendations which were specifically rejected by the House of Delegates and except as to the recommendations for amending the Constitution and By-Laws, which recommendations the Speaker ruled do not require any vote or action of the House of Delegates at this Annual Meeting, in which ruling this House of Delegates concurs.

(The motion was seconded.)

SPEAKER REECE: You have heard the motion and the second.

All in favor say "aye."

(A chorus of "ayes.")

Opposed "no."

(No response.)

It is so ordered.

(The meeting then proceeded to other business.)

* * *

PRESIDENT RHODES: The first of these was a recommendation of the Council to the House of Delegates that it approve hyphenation of Pamlico and Craven Counties as one component county sosiety.

I move the adoption of this recommendation.

(The motion was seconded.)

SPEAKER REECE: All in favor say "aye."

(A chorus of "ayes.")

Opposed no.

(No response.)

So that motion carried.

PRESIDENT RHODES: The recommendation that the House of Delegates approve the activities of the Committee on Traffic Safety, liaison to the highway patrol, establishing five member physician committees and six highway patrol districts to review qualifications of questionable applicants for driver's license.

I move the adoption of this recommendation.

(The motion was seconded.)

SPEAKER REECE: All in favor say "aye."

(A chorus of "ayes.")

Opposed no.

(No response.)

So the motion carried.

PRESIDENT RHODES: To recommend to the House of Delegates consideration of the possibility of a central billing of County, State, and AMA Medical Society dues. This matter has been referred to the Committee on Finance for further consideration, but I am reporting it here in case of implementation during the next budget year.

I move the adoption of this portion of the report.

(The motion was seconded.)

SPEAKER REECE: All in favor say "aye."

(A chorus of "ayes.")

Opposed no.

(No response.)

The motion carried.

PRESIDENT RHODES: The Council recommends the adoption of the principle of consideration by the Board of Higher Education of degree nursing training programs in North Carolina.

I move the adoption of this part of the report.

DR. BEDDINGFIELD: The report is being received as information.

PRESIDENT RHODES: Yes.

SPEAKER REECE: The recommendation has been made that this be received as information. Is there a second?

(The motion was seconded.)

SPEAKER REECE: All in favor say "aye."

(A chorus of "ayes.")

To the motion is carried.

PRESIDENT RHODES: The Council passed a motion that the Society grant to MedPac of North Carolina $5,800 for educational purposes with this monies to be kept in a separate fund and utilized only for educational purposes.

I move the adoption of this part of the report.

A MEMBER: I Just want a definition of educational purposes. If this is strictly political, let's say so.

PRESIDENT RHODES: As I understand it the AmPac Program, as initiated by the AMA in 1961, was a two-pronged effort in the legislative area, one of these was educational and the other was political. The North Carolina State MedPac, organized two years ago, has engaged in educational activities and also, to a limited extent in political activities. The MedPac group now, the organization feels that in view of its direct relationship to medicine and to medical activities it should have greater support from the Medical Society, and to involve its participation in an educational program with the phyisicians who are members of the society.

That would be my understanding.

SAME MEMBER: That doesn't answer my question, but, at any rate I would like to know, too, where the $5,800 is coming from. I don't see anything about it in the budget and we have only a surplus of $7,945, so I would like to know where we are going to get the money.

PRESIDENT RHODES: I'm going to ask Dr. John Kernodle, a member of the AmPac Board, and I would request that he speak to this point.

DR. JOHN KERNODLE: Mr. President, first, I will answer the second question and that is, Where is the money coming from? I will refer that to Dr. Wayne Benton of the Finance Committee who can answer. I think he can tell you that there is the money available in the surplus fund but I will let him answer that.

I would like to clarify this educational program just a moment. There is a need for education, for expenses of postage, for the circulation of letters and for information-gathering. It is an educational side of the program of MedPac or AmPac on the national level. Organizations or corporations cannot contribute to candidate support but corporations can contribute to all types of educational programs. This is an educational side, the candidate support side is hard money. That comes from contributions from memberships in MedPac and AmPac.

None of the educational money can be used for any candidate support. Hard money can be used for educational support and vice versa. There are two phases of the program.

For instance on the AmPac level a large proportion of the program is educational, at least four parts to every one part of candidate support The educational funds come from many of our friends in the Pharmaceutical Association, from American Medical Association, from other organizations that are interested in the same program.

The candidate's support money comes from us, the doctors that are members, and their wives that are members of AmPac and MedPac. None of this money can be given by an organization such as the Pharmaceutical Association for use as candidate support.

Therefore, there is the need in North Carolina to stimulate an educational program, an office force and such, and these are the monies that we are asking for, through the Board of Directors and the Chairman, Dr. Ed. Bivens of MedPac.

Thank you.

PRESIDENT RHODES: Thank you, John.

DR. AMOS JOHNSON: Mr. President, it seems that there are two things involved here. One is raising money for educational purposes and administering money for educational purposes, which is one thing. The other is moving this activity, if I understood correctly, to within the confines of our state office in Raleigh.

Is that correct?

PRESIDENT RHODES: That part of this motion is referred to a committee to be appointed by the President for study.

DR. AMOS JOHNSON: For study.

PRESIDENT RHODES: That was the second part of the motion.

DR. WAYNE BENTON: Excuse me for interrupting, I believe part of this is out of order. The motion that was made at the Council was that we study it and you are not making a motion to them, you are announcing that it would be studied, and after this whole thing, AmPac and all has been studied then it will be brought to the Council.

It is not open for debate right now, or it should not be.

DR. BEDDINGFIELD: Mr. President.

PRESIDENT RHODES: Yes.

DR. BEDDINGFIELD: May I question Dr. Benton's interpretation?

PRESIDENT RHODES: I do not understand his interpretation of the action taken yesterday.

DR. BEDDINGFIELD: I understand that the Council recommended that $5,800 be granted.

PRESIDENT RHODES: That's right. That's correct.

DR. BEDDINGFIELD: Then this was a separate and independent action, the moving of the headquarters to Raleigh which was to be a subject to be studied.

PRESIDENT RHODES: That's correct.

I am sure you are right, Dr. Beddingfield. That is the correct interpretation, I am sure, of the

motions that were made.

DR. BEDDINGFIELD: Then we will have to vote here today on the —

PRESIDENT RHODES: On the $5,800 appropriation, and that was a motion that was passed.

DR. BEDDINGFIELD: I would like to speak to that point just one moment.

It is not often that I disagree with good friends like Wayne Benton and John Kernodle. Nobody has been more interested in political activity among physicians than I have, but it is my feeling that the reason that AmPac at the national level was created outside the confines of the American Medical Association, and the reason that MedPac was created in the state outside of the confines of the Medical Society was to provide a separate vehicle, unfettered by law for this type of perfectly proper political activity.

But this is not really the real purpose as a scientific, tax-exempt organization, for which we were chartered by the state, and I believe that we should maintain and continue to maintain our separate identities.

I support, I believe in MedPac and AmPac, but I think it was a very good reason in the beginning for creating these things as separate entities and I think they should be kept separate.

PRESIDENT RHODES: I think by way of explanation, and since Dr. Beddingfield has made his statement, and since I had some part in establishing the MedPac organization in North Carolina, I would say this; that in the beginning when we discussed this and when it was established, when the organization was established it was the feeling of those of us who were involved in establishing it that we should keep it entirely separate from the Medical Society.

Since that time, however, there has been a considerable change in the general attitude all over the country, as relates to this activity in relation to state medical societies, and many states do operate their organizations in their own offices, in the headquarters offices of the state society under the direction of their executive directors.

I am going to ask Dr. Johnson you have anything to add, since he did not finish his statement a moment ago. I think he was interrupted.

DR. AMOS JOHNSON: No, I was not interrupted, Mr. President. I got the statement answered that I wanted and I got it from three or four sources which was very good.

It occurs to me that if we are, in effect, a tax-free organization, so chartered and licensed in the state, that any maneuver to bring under our own cover of our offices in Raleigh and to have our own paid personnel working towards a phase of this AmPac maneuver, that we would be jeopardizing our tax-free status, that we would be making ourselves liable for those in politics whom we chose not to support, but rather to support their opponents, to make a tax upon us and that it is not of that degree of necessity that we have this within our own offices and that we expose ourselves to the potential for harm that can come from it.

What I wanted to know a while ago was whether this is the place that I should speak to that or at a reference committee. I am opposed to us, even though we may be technically within the bounds of the law, exposing ourselves to the jeopardy and criticism which I know will be forthcoming in due time.

DR. KERNODLE: Mr. President, Mr. Speaker, I think that what Dr. Johnson has just said is talking about something that has already been referred to a study committee. We are not talking about putting it into the central office or bringing it to Raleigh at all, in this particular motion.

The Council recommended that we allocate $5,800 to the operation of the educational program and clerical work on this program. It has nothing to do with moving into Raleigh at this moment. A movement of that nature was not for discussion at this hour I would not think. I think that was a recommendation of the Council to a study committee.

PRESIDENT RHODES: That's right.

DR. KERNODLE: I would like to say that over 70 per cent of our neighboring states have done likewise, have put monies into this program because it is permissible and I could give Dr. Johnson and others several quotations on IRS regulations about it because I have these and I can give their own counsel's statement about it in regard to the IRS regulations.

But as far as this type of contribution and grant to the MedPac program, it is our baby and we are involved in it very deeply. I think that this $5,800 is a part of our program.

DR. LENOX BAKER: I think what Dr. Kernodle says, most of what he says is very fine. I think Dr. Johnson has told us where our troubles may lie. I do not think there is any question in any of our minds what MedPac does. I did not give them any money, when I donated, for any educational program; I gave mine for a political program, and I stand up here proudly to say so, and I think most of the people in this hall who donated to MedPac did it knowing that they were donating to a political movement in medicine. God bless them.

Now, why get us involved in an impossible thing. It seems to me if we want to vote this money, and I am all for voting the money, and I think perhaps some people who want MedPac, if you want a committee, that this money should be kept definite, separated from any money that MedPac has their hands on. If you want to appoint a committee to handle this educational thing that you are talking about, why, you may appoint those people on MedPac to do so. That is your prerogative but for God's sake, let's not get ourselves

in the position Labor found themselves in and let's not let people start criticizing us for things for which we do not stand.

We have been criticized enough, but in the public's eye this will condemn us, this will be a knife that we won't get out of our backs for a long time.

DR. EVERETT BUGG (Durham, North Carolina): Mr. President, I certainly agree with Dr. Baker. We should not get this organization involved in a separate organization, no matter whether there are members that are common members. My reason for it is not whether we will get in trouble with the tax people or even the criticism, but a purely moral one.

We are here voting away funds for our colleagues for things they may not want them voted for when they are perfectly able to join this organization and make such contributions as they desire.

There are definitely members of our organization that are opposed to MedPac and opposed to AmPac and yet we are or we would be in a position of forcing them to contribute to something they do not agree with.

SPEAKER REECE: Any further discussion?

DR. EDMONDSON: I move it not be accepted.

A MEMBER: Mr. Speaker, it took five days before Colonel Kendall, and the lawyers, by just removing one word could keep us from having to pay tax not ten years ago. If you remember, our Constitution and By-Laws said scientific and education and fostering the monetary future, and the "monetary future" cost us five days with Colonel Kendall and his officers, and it would have cost us at that time between 7 and $900 a year, if they had not seen fit to come along with us, if we erased the "fostering of the monetary future."

I think if we move in any direction we are going to get in trouble because those men are watching us and they picked that up in our Constitution about seven to ten years ago. In other words it was when Dr. Fred Hubbard was President of the State Medical Society.

(Calls for the question.)

DR. BLACKMON: Mr. President I am heartily in agreement with what Dr. Amos Johnson has said and I think we need to weigh that very carefully when we stop and realize that we elect our Board of Medical Examiners here at this meeting.

SPEAKER REECE: We have a motion on the floor that we contribute this $5,800 to MedPac and also that the study be made as to the feasibility and advisibility of moving the headquarters office — that is not a part of it, just the question of the money.

PRESIDENT RHODES: The question is on the money.

SPEAKER REECE: The question is on the money alone.

(Call for the question.)

All in favor say "aye."

(A chorus of "ayes.")

Opposed no.

(A chorus of noes.")

It is defeated.

PRESIDENT RHODES: The Council approves and recommends to the House of Delegates approval of the principle of the passage of nasal gastric tubes by qualified, trained personnel under the direction of the physician and that the legal council be directed to obtain an opinion from the Attorney General confirming this policy.

I move the adoption of this part of the report.

(The motion was seconded.)

SPEAKER REECE: All in favor say "aye."

(A chorus of "ayes.")

Opposed no.

(No response.)

So the motion is carried.

PRESIDENT RHODES: Finally, I will repeat very briefly what I said at the end of this report in the beginning, after deliberation in two sessions of the Council this matter was deferred in the January meeting until the May meeting and, after further consideration, a motion was made that the Council approve and ask the House of Delegates to further approve the change in our Constitution and By-Laws which will make it possible for any person who meets the specified requirements of membership to be granted such membership in the Society as an active member.

(Transcript of this portion of the proceedings was provided under separate cover.)

SPEAKER REECE: You have heard the report of the President from the Executive Council. Do I hear a motion that we accept this report as a whole?

A MEMBER: I so move.

(The motion was seconded.)

SPEAKER REECE: All in favor say "aye."

(A chorus of "ayes.")

No.

(No response.)

It is so carried.

I recognize the President.

DR. AMOS JOHNSON: Let me clear something up in my mind. If you say accept the report of the President, as amended, or as altered, yes, we can vote for it, but if you just flatly accept the report of the President as it was reported by the President, then we have already taken action on this matter that we were just deferring until next year.

SPEAKER REECE: I stand corrected, as amended.

All in favor say "aye," as amended.

(A chorus of "ayes.")

Opposed no.

(No response.)

PRESIDENT RHODES: I offer my apologies for the delay in this report.

It is now my privilege to open the report of the Nominating Committee, of which Dr. Frank Jones is Chairman, as presented to this House.

For President-Elect, Dr. George Washington Paschal, Jr., of Raleigh.

For First Vice President, Dr. Hubert McNeill Poteat, Jr., of Smithfield.

For Second Vice President, Dr. Wayne Jefferson Benton of Greensboro.

For Speaker of the House, Dr. John Cochrane Reece of Morganton.

For Vice Speaker of the House, Dr. D. E. Ward, Jr., of Lumberton.

For Delegates to the American Medical Association, Dr. Donald Brock Koonce of Wilmington and Dr. John Robert Kernodle of Burlington.

For Alternate Delegates to the American Medical Association, Dr. Eben Alexander, Jr., of Winston-Salem and Dr. George Thomas Wolff of Greensboro.

Councilors and Vice-Councilors:

For the First District Councilor, Dr. Thomas Preston Brinn, Hertford.

For Vice-Councilor, Dr. William Henry Romm, Moyock.

Second District Councilor, Dr. Lynwood Earl Williams, Kinston.

Vice-Councilor, Dr. Ernest Waddill Larkin, Jr., of Washington.

Third District Councilor, Dr. Dewey Herbert Bridger, Bladenboro.

Vice-Councilor, Dr. Frank Russell Reynolds, Wilmington.

Fourth District, Councilor, Dr. Edgar Theodore Beddingfield, Jr., Stantonsburg.

Vice-Councilor, Dr. Theodore Tilghman Herring, Wilson.

Fifth District Councilor, Dr. Harry Holler Summerlin of Laurinburg.

Vice-Councilor, Dr. Charles A. Speas Phillips, Pinehurst.

Sixth District Councilor, Dr. John Glasson, Durham.

Vice-Councilor, Dr. Fred Geer Patterson, Chapel Hill.

Seventh District Councilor, Dr. Edward Shirley Bivens, Albemarle.

Vice-Councilor, Dr. Charles LeGrand Stuckey, Charlotte.

Eighth District Councilor, Dr. Louis de Schweninitz Shaffner, Winston-Salem.

Vice-Councilor, Dr. Claude Ackle McNeill, Jr., Elkin.

Ninth District Councilor, Dr. Thomas Lynch Murphy, Salisbury.

Vice-Councilor, Dr. Paul McNeely Deaton, Statesville.

Tenth District Councilor, Dr. William Albert Sams, Marshall.

Vice-Councilor, Dr. Walter Otis Duck, Mars Hill.

In the name of the Nominating Committee, I move you, sir, the adoption of this slate of officers, or rather I place in nomination this slate of officers.

DR. HARLOE: In my ignorance I was unaware that the By-Laws had been changed to have a Nominating Committee to elect councilors.

Is this true?

PRESIDENT RHODES: To elect councilors?

DR. HARLOE: Are you nominating?

PRESIDENT RHODES: These are nominations.

DR. HARLOE: Do the By-Laws allow the Nominating Committee to nominate councilors now, instead of the district meetings?

PRESIDENT RHODES: They always have nominated them, the Nominating Committee always has nominated the councilors.

SAME MEMBER: I beg your pardon, sir.

I was under the impression, sir, and perhaps I am ignorant of the situation, that they were nominated at the district meetings when they held their caucus.

PRESIDENT RHODES: That is not my understanding according to the By-Laws. The By-Laws do not provide for that as far as I know.

SAME MEMBER: Would you elucidate on the custom, Mr. Barnes?

May I ask to direct this question to Mr. Barnes.

EXECUTIVE DIRECTOR BARNES: Councilors being officers of the State Medical Society, there is a provision for the election of officers of the State Medical Society, including the executive officers and the councilors and the vice-councilors, and the constitution and by laws provide for the nomination of these officers by the Nominating Committee.

Now, a District Caucus can recommend, but the Nominating Committee nominates, and the House of Delegates elects.

PRESIDENT RHODES: I now open the nominations for nominations from the floor.

Dr. Patrick.

DR. SIMMONS PATRICK (Kinston, North Carolina): I think the members of the caucus elect—

PRESIDENT RHODES: We are not electing a Nominating Committee at this time.

DR. PATRICK: I know we are not.

PRESIDENT RHODES: We are presenting the report of the Nominating Committee.

DR. PATRICK: I think the confusion in his mind is that the members of the Nominating Committee are elected at the caucus.

PRESIDENT RHODES: That's correct.

DR. PATRICK: And I think this is where his confusion comes from.

PRESIDENT RHODES: We have not reached

that point yet.

The floor is open for additional nominations.

I am presiding because Dr. Reece's name is on the list.

DR. BEDDINGFIELD: I am from the Fourth District and my constituency has decided I have been on the Executive Council long enough. I didn't know — I shared Dr. Harloe's ignorance, I thought that the nominees for councilors were also made at the caucus instead of by the Nominating Committee.

The physicians of the Fourth District realize the District Societies have no political power or place in the heirarchy of things but, nevertheless, representing a group from the Fourth District wish to place in nomination for the Fourth District for councilor Dr. Ralph Dunn from Tarboro and for Vice-Councilor Dr. Tom Taylor from Roanoke Rapids.

DR. JOHN HARLOE: Mr. Chairman, I am not being an obstructionist. I would like to make a nomination. For the Seventh District for the Office of Councilor, Dr. David Welton from Mecklenburg County.

PRESIDENT RHODES: Any further nominations?

DR. JOHN LEWIS McCAIN (Wilson, North Carolina) (President Fourth District Medical Society): I would offer a clarification.

Dr. Beddingfield has listed a list of people who were suggested for nomination by the Fourth District Medical Society and I would like to make it known to the group that the present officers would not be able to serve.

PRESIDENT RHODES: Is the Chairman of the Nominating Committee here?

DR. FRANK W. JONES: Yes.

PRESIDENT RHODES: Dr. Jones, I would ask if you, as Chairman of the Nominating Committee, could withdraw the names of these two nominees if they are unable to serve, or maybe we should have a test vote.

DR. JONES: Mr. Speaker, I would think that would have to be ruled on from a parliamentary standpoint. I do not know whether the Chairman has a right to withdraw a name which has been presented by ten people.

PRESIDENT RHODES: Dr. Paschal, will you rule on that, please, for us as parliamentarian?

PARLIAMENTARIAN PASCHAL: Mr. President, I would ask our counsel to help with that decision.

Mr. Anderson.

PRESIDENT RHODES: Mr. Anderson, will you give us a ruling on that?

MR. ANDERSON: I do not believe that the nomination made by the Nominating Committee can be withdrawn by the Chairman of the Nominating Committee.

PRESIDENT RHODES: I think you are right.

MR. ANDERSON: The only way you can get off the slate is to withdraw or have a test, have a ballot.

DR. JONES: I suspect in the interest of expediency someone might say, like one of our former presidents, if nominated I won't serve and so on and so forth and that would be a way of getting out of it.

PRESIDENT RHODES: As I understand it, these nominees are not in the house.

DR. BRUCE FRANZ (Asheville, North Carolina): I would like to put up one other name for the Tenth District Councilor, Dr. James Raper.

PRESIDENT RHODES: Dr. James Raper has been nominated for Tenth District Councilor.

Any other further nominations?

(No response.)

Is there a motion to close the nominations?

DR. HARLOE: I would like to move, for expediency, that the nominations suggested for councilor from each district be separated and voted upon by each district, rather than by the House of Delegates as a whole.

It can be done, if a motion is made accordingly, can it not?

I still believe, sir, that I am correct that in the past the custom has been that the councilor has been elected in caucus. I have been coming to these things now for thirteen years and that has been the custom.

DR. MARVIN LYMBERIS (Mecklenburg): Mr. Chairman, I think the reason that this has come about is it is a change in procedure over the past years when I have been a delegate. Over the past years there has been a caucus and the Nominating Committee nominated and then the new Nominating Committe has nominated the councilors on the advice of council, but we have never nominated councilors from the old Nominating Committee before.

It has been the new Nominating Committee that has nominated the councilors.

PRESIDENT RHODES: I would take exception to that from my own personal understanding and experience.

Mr. Anderson, would you clarify that for us?

MR. ANDERSON: The Nominating Committee was given the duty of making nominations for all offices in the Society.

PRESIDENT RHODES: That's right.

MR. ANDERSON: As explained by Mr. Barnes, that includes councilors who are listed as officers of the Society and the fact that the Nominating Committee makes the nomination does not mean anymore than the nomination being made by any other member of the House of Delegates, as far as parliamentary procedure is concerned. You just have nominations from two different sources. So that the simple expediency would be to separate the offices for which there is more than one nomina-

tion —

PRESIDENT RHODES: That's right. That is what I plan to do.

MR. ANDERSON: — and vote on those as the President has already suggested, and then the others would stand as nominated by the Nominating Committee to be accepted, or elected by acclamation, if you so choose.

DR. HARRY JOHNSON: Mr. President, I was selected delegate, or Councilor from the Eighth District three years ago, through the same procedure as we are attempting to carry out the elections this year, and I was elected Vice-Councilor some two or three terms before that, under the same procedure.

The gentlemen from Mecklenburg are certainly in error as to the election of councilors for the past several years.

PRESIDENT RHODES: That's right. I think that is correct, Dr. Johnson.

DR. WILKERSON: Mr. President, is a motion in order for closing the nominations?

PRESIDENT RHODES: I have called for such a motion.

DR. WILKERSON: I so move.

(The motion was seconded.)

PRESIDENT RHODES: The motion has been made and seconded that the nominations be closed.

As many as favor the motion make it known by saying "aye."

(A chorus of "ayes.")

(Opposed "no.")

(No response.)

We now vote on the Councilors from the Fourth District.

The nominees for Councilor, Dr. Ralph Dunn and Dr. Edgar T. Beddingfield, Jr. We will have to vote on these separately.

So many as favor the election of Dr. Ralph Dunn will make it known by saying "aye."

VOICES: No, no.

PRESIDENT RHODES: I beg your pardon.

A MEMBER: Mr. Chairman, does not the Constitution provide that the election of all officers will be by secret ballot, unless there is only one nominee?

PRESIDENT RHODES: I guess you are correct. I will stand corrected on that.

PRESIDENT RHODES: Let me give you the names of all of these nominees for the three districts in question.

DR. FRANZ: Mr. President.

PRESIDENT RHODES: Yes.

DR. FRANZ: I would like to ask something in connection with this problem. I do not think that any of us are in any position to distinguish between some of the nominees for the councilor. Now, the men in the immediate district, I think, know exactly what is going on in their own district. I do not feel that I know enough about what is going on in the Fourth District to vote intelligently, but I do know what is going on in the Tenth, and we have very definite need for a change.

DR. HILL: Mr. President.

PRESIDENT RHODES: Dr. Hill.

DR. HILL: I wonder if we could not vote on the ones that are not in question first and get that out of line and then vote on the three districts that are in question one at a time.

PRESIDENT RHODES: We can do it either way, I believe.

DR. HILL: I move you, sir, that we vote on those that are not in question.

PRESIDENT RHODES: Do I hear a second to the motion?

(The motion was seconded.)

PRESIDENT RHODES: So many as favor the motion make it known — excuse me, Dr. Beddingfield.

DR. BEDDINGFIELD: I might be able to add one more district to that, if you will accept what I want to do.

I am —

PRESIDENT RHODES: Are you making a nomination?

DR. BEDDINGFIELD: I am asking that my name as a nominee from the Nominating Committee as Fourth District Councilor be withdrawn and Dr. Tilghman Herring was nominated for Vice-Councilor, and Dr. Herring is not here but with his knowledge and with his assent that we would have a clean sweep in the Fourth District, if I can do so, I would ask that my name and his name be withdrawn as nominees for Councilor and Vice-Councilor.

Mr. Anderson tells me that I can withdraw my name.

PRESIDENT RHODES: I don't believe you could withdraw Dr. Herring's name though.

DR. BEDDINGFIELD: Well, it will eliminate one contest anyway.

PRESIDENT RHODES: I think we had better identify the districts being withdrawn.

Dr. Bivens.

DR. EDWARD S. BIVENS: I am Seventh District Councilor, I would like to withdraw my name as a nominee for Councilor.

PRESIDENT RHODES: Dr. Bivens has withdrawn his name as nominee for councilor.

I am going to review because I may not have these names right, I am going to review the nominees for the Fourth District.

Dr. Beddingfield has withdrawn therefore Dr. Ralph Dunn is the nominee for Councilor.

For Vice-Councilor, Dr. Tom Taylor and Dr. Tilghman Herring.

In the Seventh District, Dr. Bivens has withdrawn his name as nominee for Councilor, leaving Dr. David Welton as the nominee for Councilor.

And in the Tenth District, Dr. James Raper and Dr. William Albert Sams are the nominees for Councilor.

Now we will drop out these districts - the Fourth, Seventh and Tenth, and I now place in nomination, or now I ask for a vote on the remainder of this Nominating Committee report.

Do you want me to read them anymore?

(No response.)

PRESIDENT RHODES: The motion was made and seconded that the nominees be elected.

So as many as favor the election, as of the report (Nominating Committee) as read, of these men as officers of the Society will make it known by saying "aye."

(A chorus of "ayes.")

It is so ordered.

Now, we will have to vote by secret ballot.

DR. O'NORRIS SMITH (Greensboro, North Carolina): Mr. President, I hate to step into the Tenth District's matters and make a vote, because I am totally ignorant, and these other districts also where there are two candidates. I would propose, I would move that this vote be *tabled* until after the caucus and I would like the caucus in those affected districts to take a vote and report back to us before we have to vote.

(The motion was seconded.)

PRESIDENT RHODES: It is my understanding that when the Nominating Committee has made this report that its function ceases and I cannot transfer its functions to a new Nominating Committee, therefore, I would rule that this motion is out of order.

DR. SMITH: I didn't ask for that. I merely asked for the advice of those districts that are affected before I have to vote. I did not ask for any further nominations.

PRESIDENT RHODES: Dr. Jones, did you want to make a comment?

DR. JONES: Permission is requested to speak, not being a member of the House.

PRESIDENT RHODES: Mr. Parliamentarian.

DR. JONES: It is my recollection that in the past that the representative to the Nominating Committee from each Councilor District has been elected in caucus by the members of the delegates from that District and they represent that District on the Nominating Committee.

Incidentally, there was a case in the current Nominating Committee —

PRESIDENT RHODES: What is that, sir?

DR. JONES: That was true in this current Nominating Committee.

PRESIDENT RHODES: Yes.

Dr. Paschal, would you mind helping me a little bit on that? It seems to me that would be out of order. These nominations have been made and according to our Constitution and by laws election of the officers is by the House of Delegates.

PARLIAMENTARIAN PASCHAL: That is true and is my understanding of this thing. I do think that the motion made here on the floor, however, that the election can be DEFERRED and the recommendations or nominations can be made from the floor following consultation —

PRESIDENT RHODES: The motion was to table.

DR. SMITH: To defer.

PRESIDENT RHODES: I didn't understand that.

DR. SMITH: To defer until after the caucus and then the caucuses would report back.

PRESIDENT RHODES: As I understood the motion, I may be in error, but it was to table, the original motion.

DR. SMITH: You misunderstood, sir. I proposed that we defer a vote until after the caucus.

PRESIDENT RHODES: I did misunderstand.

DR. SMITH: I wanted the advice of the caucus from those districts as to how I should vote.

PRESIDENT RHODES: Do I hear a second to that motion?

(The motion was seconded.)

So many as favor the motion signify by saying "aye."

(A chorus of "ayes.")

Opposed "no."

(Several "noes.")

The "ayes" have it.

(Laughter.)

DR. JACK HUGHES (Durham, North Carolina): Mr. Speaker, may I read from the section of the Constitution which says that no person shall be eligible to be elected to any office, any such office who is not in attendance upon the annual meeting and who is not and so forth. Would not that rule out somebody from the Fourth District who is up for Vice-Councilor, is he not absent today? Would that cover his situation?

PRESIDENT RHODES: According to the present constitution and by-laws, I believe that would rule him out.

SPEAKER REECE: (Pounding gavel to restore order) The House will please come to order.

Under section E, we will caucus for the organization of the Nominating Committee. Please go to your respective standards. Remember that a man cannot succeed himself more than once on the Nominating Committee and therefore, if he has served two years he cannot be re-elected to the Nominating Committee.

(Caucus.)

SPEAKER REECE: The House will reconvene.

The Tenth District informs me they wish to re-caucus. Will they please assemble?

(Caucus.)

We must reconvene now for the election of two Councilors for the Fourth District and for the Tenth District. I would recognize Dr. Beddingfield, at

this time.

DR. BEDDINGFIELD: Mr. Speaker, the constituents in my District got together and by popular demand I am playing Governor Scranton, you cannot (tell) whether I am in or out of the race, but my name is back in, so I am withdrawing my withdrawal.

(Laughter.)

And I am asking that my name be placed in nomination for District Councilor and I make the nomination from the floor for Dr. Harry Weathers as Vice-Councilor.

May I offer one further word of explanation? Dr. Dunn who was — whom I had placed in nomination a while ago is not present and as far as I know he will not be present at the annual session. Under the interpretation we have heard of the Constitution and by-laws, therefore, he is ineligible for nomination. This is the reason.

A MEMBER: Are you nominating yourself?

DR. BEDDINGFIELD: I'm withdrawing my withdrawal. I am not nominating myself.

SPEAKER REECE: You say Dr. Herring is not here and will not be here?

DR. BEDDINGFIELD: No, he is not here and will not be here and therefore as an individual I am placing from the floor in nomination Dr. Harry Weathers.

SPEAKER REECE: For Vice-Councilor?

DR. BEDDINGFIELD: For Vice-Councilor. That's correct.

SPEAKER REECE: In other words we have only two names, a Councilor and a Vice-Councilor for the Fourth District?

DR. BEDDINGFIELD: *No contest in the Fourth District.*

SPEAKER REECE: No contest in the Fourth District.

EXECUTIVE DIRECTOR BARNES: Mr. Speaker, I would respectfully call to your attention that the Committee on Nomination did report Dr. Edgar T. Beddingfield as the nominee for the position of Councilor of the Fourth District and Dr. T. T. Herring for the position of Vice-Councilor. Now I believe you have got a contest.

DR. BEDDINGFIELD: Dr. Herring is not present. Is he an officer of the State Medical Society? He's not an officer of the State Medical Society.

EXECUTIVE DIRECTOR BARNES: He is present at this annual session, if he registers. In the opinion of the Constitution and by-laws if he registers at this annual session, he attended this annual session.

DR. BEDDINGFIELD: But I have personal knowledge that Dr. Herring will not register at this annual session. That is the reason, so that we have a nominee.

SPEAKER REECE: We have no contest, if I interpret it right, in this Fourth District.

A MEMBER: Mr. Speaker, I believe this thing rotates around the problem, can the Nominating Committee nominate the man without him being present. We know that you cannot nominate him from the floor without him being present, but can the Nominating Committee, does the Nominating Committee have the privilege of placing a man in nomination who is not present or who will not be present at the annual meeting?

SPEAKER REECE: They may not know when they write the report.

SAME MEMBER: Because Tilghman Herring was placed in nomination by the Nominating Committee, not by the floor.

SPEAKER REECE: As I understand there is no contest from the Fourth.

Are there any further nominations?

PARLIAMENTARIAN PASCHAL: Mr. Speaker.

SPEAKER REECE: Yes, sir.

PARLIAMENTARIAN PASCHAL: It is my opinion that the nominations as have been made by the Nominating Committee are not subject to change, and I would think that Dr. Herring, lacking any direct word from him, would be properly in nomination as Vice-Councilor.

Now, it is perfectly legitimate for additional nominations to be made, and I believe that this is proper.

DR. BADIE T. CLARK: I believe there is no dispute in our District. We wish to place Dr. Weathers' name in nomination from the Fourth District.

SPEAKER REECE: From the Fourth District yes as Vice-Councilor.

DR. CLARK: As Vice-Councilor yes.

SPEAKER REECE: Am I right now, that there is no contest for Councilor from the Fourth Distrist, only on Vice-Councilor?

DR. CLARK: Yes.

DR. McCAIN: May I speak in Dr. Weathers' behalf. As a partner of Dr. Herring's, why, he was in agreement with this, that somebody else should have it rather than him this year, and at the Fourth District meeting it was the opinion that somebody, since Dr. Beddingfield and Dr. Herring are from the same county, that it would be well to diversify the counties, the representation, and Dr. Weathers was suggested from this standpoint in that it would give, extend to the county representation.

I am speaking in behalf of the election of Dr. Weathers for Vice-Councilor.

SPEAKER REECE: You see what we are trying to get out of is a tally vote, unless we have to. We may get this clarified.

DR. WAYNE BENTON: A point of order, Mr. Speaker.

SPEAKER REECE: Yes.

DR. BENTON: It is my understanding of Roberts' Rules of Order that you can suspend the rules with a two-thirds vote of the House, of the as-

sembly.

It seems to me that the easiest way of getting by this so that we will not have to do a ballot is to move that the rules be suspended for the election of the Fourth District Councilor and Vice-Councilor, and then as soon as — if it passes two-thirds, then we vote on both of them, because there is no contest then, and then we can go right back under the rules.

I so move that the rules be suspended for this purpose.

(The motion was seconded.)

SPEAKER REECE: The motion is made and seconded that the rules be suspended.

All in favor say "aye."

(A chorus of "ayes.")

Opposed "no."

(No response.)

So the motion is carried.

We have two names to be presented.

DR. BENTON: We can vote by voice now.

SPEAKER REECE: Dr. Beddingfield then.

All in favor of Dr. Beddingfield for Councilor.

(A chorus of "ayes.")

Opposed "no."

(No response.)

So Dr. Beddingfield is elected.

Now for Vice-Councilor, Dr. Harry Weathers.

(A chorus of "ayes.")

Opposed "no."

DR. HARRY JOHNSON: Mr. Speaker.

SPEAKER REECE: Yes.

DR. HARRY JOHNSON: If I am not in error, there are three nominees for the Vice-Councilorship for the District, Dr. Herring originally by the Nominating Committee, Dr. Taylor was nominated from the floor and Dr. Weathers was nominated from the floor.

DR. BEDDINGFIELD: Dr. Taylor was nominated originally for Councilor but was found to be ineligible, so he is out of it.

The question is between Dr. Herring whose name was submitted from the Nominating Committee and Dr. Weathers. Dr. Herring is not here and will not be here at this meeting.

PRESIDENT RHODES: And the rules were suspended.

DR. BEDDINGFIELD: And the rules were suspended.

A MEMBER: Mr. Speaker.

SPEAKER REECE: Yes.

SAME MEMBER: Under suspension of rules and acting on the recommendation of the Fourth District caucus I move that Dr. Harry Weathers be elected Vice-Councilor by acclamation.

(The motion was seconded.)

SPEAKER REECE: All in favor say "aye."

(A chorus of "ayes.")

Opposed "no."

(No response.)

So carried and Dr. Weathers is elected.

SPEAKER REECE: In the Tenth District we must have a ballot vote for the Councilor.

Dr. William A. Sams and Dr. James Raper.

The tellers are now passing out the slips for the ballot.

A MEMBER: Mr. President, has the caucus made a report to us?

SPEAKER REECE: I do have a caucus to report that has been given to me from the caucus from the Tenth District:

Dr. Sams, three; Dr. Raper, twelve.

DR. WILLIAM A. SAMS: Mr. Speaker.

SPEAKER REECE: Yes, sir, Dr. Sams.

DR. SAMS: In our caucus we nominated men for the Nominating Committee and then it was explained that Dr. Raper was not present and therefore he was not eligible. So the consensus of opinion was then, and I made the remark to Dr. Gilbert who was on the Nominating Committee last year, that I had some further work that I had in mind to do for the next year or year and a half in the District and I would be glad to get out of the way then.

It seems that that was satisfactory at our caucus and I came and turned in the report.

Since that time they have had a recaucus and I was not asked to go to it and not told a thing about it and, while I am Councilor and have been for 16 years from the Tenth District, and have tried to be loyal and faithful to all members of the Society and straighten all of the things that we have had done and worked as faithfully as I knew how, I do object strenuously, Mr. Speaker, to being kicked out.

And I do not think that it has been done fairly by me at all. Therefore I want the House of Delegates to know that I believe in wide-open warfare. I believe it is all right to contest it but — it is all right and I just wanted the House of Delegates to know that the first caucus was for me and that was agreed upon by all. The recaucus was taken afterwards and I knew nothing about it.

(Calls for the question.)

SPEAKER REECE: The question, according to ballot.

A MEMBER: May I say a word? I think Dr. Sams misunderstands. This is no open warfare.

The first caucus was questioned because Dr. Raper is not yet here. He is expected either tomorrow or Tuesday for a couple of other meetings in connection with this general meeting. The re-caucus was announced, everyone heard that.

The point at hand is not questioning Dr. Sams' past work and faithfulness. We simply have mentioned that in view of recent legislative action, in view of the fact that Dr. Raper has for some time been heading our Legislative Committee locally, in view of the fact that he has made a trip to Washington and is up to date on many of the affairs

of the Society currently problematic, that we felt that it was fairer to give a job of this sort to him and not to burden Dr. Sams with something that would be additional problems to him in the future, and in this way the best interests of our District could be served.

SPEAKER REECE: Therefore, we will proceed with the vote.

DR. SAMS: Mr. Speaker, may I answer that? I said in our caucus that we have fifteen counties in my District. Why not go back and let each one of the counties say who they want for Councilor, out of the fifteen counties in the district, and I would be perfectly happy with that. I am quite sure that the others would not be.

SPEAKER REECE: Councilors are elected by the House of Delegates of the Medical Society, Dr. Sams.

DR. SAMS: What?

SPEAKER REECE: The Councilors are elected by the House of Delegates of the Medical Society and, therefore, we will proceed with the tally of the vote.

Will you turn in—

DR. T. S. RAIFORD: Mr. Speaker.

SPEAKER REECE: Yes.

DR. RAIFORD: I hesitate to do this but I think it should be called to the attention of the House.

Chapter V, Section 5 reads as follows:

"Any person known to have solicited votes or sought any office within the gift of this Society shall be ineligible for any office for two years."

SPEAKER REECE: Will you proceed with your ballots?

PARLIAMENTARIAN PASCHAL: Mr. Speaker, have you elected the Vice-Councilor of the Sixth District? Has Dr. Dunn been considered?

SPEAKER REECE: That was no contest in the Sixth District.

PARLIAMENTARIAN PASCHAL: From the Tenth District.

SPEAKER REECE: That was not in contest. as I understand.

PARLIAMENTARIAN PASCHAL: All right.

SPEAKER REECE: Dr. Styron is acting as teller.

We now have the report of the caucus for the Nominating Committees.

The First District, Dr. Ed Bond of Edenton.

The Second District, Dr. Fleming Fuller of Kinston.

The Third District, Dr. Joseph Hooper of Wilmington.

The Fourth District, Dr. Robert Whitley of Rocky Mount.

The Fifth District, Dr. William Hollister of Pinehurst.

The Sixth District, Dr. T. C. Wilkinson of Wake Forest.

The Seventh District, Dr. Vernon Andrews of Mt. Gilead.

The Eighth District, Dr. John Burwell of Greensboro.

The Ninth District, Dr. Harvey Robertson of Salisbury.

From the Tenth District, Dr. George Gilbert from Asheville.

Do I hear a motion that these be elected from the caucuses?

A MEMBER: I so move.

(The motion was seconded.)

SPEAKER REECE: All in favor say "aye."

(A chorus of "ayes.")

Opposed "no."

(No response.)

They are elected. The Nominating Committee assemble immediately in the Administrative Offices of this building.

We will now have a further report from our President on the Nominating Committee action.

PRESIDENT RHODES: I would like to report the recommendations of the Nominating Committee for a site for the convention for 1967.

The first choice, Winston-Salem, the second choice, Durham. Each of these selections is made contingent upon proof satisfactory to the Committee and to the office of the Executive Director that said city can properly handle the convention.

I believe that, that, would require some clarification, would it not?

SPEAKER REECE: Will the Nominating Committee assemble immediately out here? Dr. Styron has asked that they be assembled immediately outside this door behind the stage.

DR. BLACKMON: Mr. Speaker, may I have the floor, sir?

SPEAKER REECE: Yes.

DR. BLACKMON: I am thinking now of next year when our delegates re-assemble and run into this same problem.

Two years ago and last year the Fifth District ran into this kind of a problem and we tried to get a solution and went before Mr. Barnes and our Legal Counsel and they reminded us that our Districts are not an integral part of the North Carolina Medical Society.

We were trying at that time to elect our representatives from those councils.

I would like to present to this group a motion. I would like to move that the Constitution and By-Laws Committee —

DR. BENTON: Out of order.

SPEAKER REECE: We still have one problem before the House, yet.

DR. BLACKMON: I'm sorry.

SPEAKER REECE: Do we have a recommendation as to the site for the convention of 1967? The first choice is Winston-Salem, the second choice, Durham.

Do we have the nominations from the floor

as to these?

Dr. Jones.

DR. JONES: I should like to speak as a member of the Society, since I am no longer a member of the Nominating Committee, a new one has been elected.

I would like to clarify this a little further, if it is permitted.

Do I have the permission of the Speaker to proceed?

SPEAKER REECE: Yes, sir.

DR. JONES: Since the Nominating Committee has met, the question of Greensboro has again arisen, or has arisen for the first time, so far as this Nominating Committee is concerned, as a formal presentation. I am sure I would speak for the members of the Committee in general to say that we, the Nominating Committee, ex-nominating committee would also have considered Greensboro, had it been presented.

I also might say that Mr. Barnes has commented with reference to the two areas suggested by the former Nominating Committee and with Mr. Barnes' permission I should like to say what he has told the former Chairman of the Committee.

Do I have Mr. Barnes' permission?

EXECUTIVE DIRECTOR BARNES: I have no objection.

DR. JONES: One other thing in passing. I think I should compliment the Committee on By-Laws and this House today for doing a job that has been badly in need of doing for many years. The rules of the By-laws and Constitution with reference to the Nominating Committee have been so totally and completely messed up that no one knew what to do, and I think the Committee working, and the House of Delegates today have helped a great deal. There are still two other areas that need to be straightened out.

Mr. Barnes makes the comment as follows, and this is for a suggestion possibly to some future nominating committee. First, allow a practical suggestion that the Society should seek, on its own, sites for conventions that offer suitable accommodations of its needs rather than for communities to vie with each other through sales propaganda and tangenital pressures to secure conventions.

Second, the Durham and Winston-Salem communities were surveyed in 1955 and 1956 at which time the opinion was given and accepted that neither presents nor reasonably could predict the availability of all of the major facilities and services essential to the accommodation of an annual session of the State Medical Society as envisioned in its operation at that time. I do not think either can do so now.

Third, some factors have changed since 1956, for the last two years the registered attendance of members for the annual sessions has diminished to near the 50 per cent mark of the 1956 attendance, so requirements may be in some aspects less, and others more, what 1967 would require is scarcely predictable now. So one would anticipate contracting for the best facilities available.

Fourth, a survey of Winston-Salem recently reveals very little additional improvement over 1956 as to accommodations for large conventions, except perhaps, in personal lodgings afforded by dispersed motor courts and dispersed dining facilities. We find the hotels have the same capacities as to lodging and practically as to dining service and assembly group services as prevailed in 1956.

The hotels at present could not accommodate our exhibit and program activities now or in the foreseeable future, even if some planned expansions were carried out.

What 1967 can foretell one could scarcely predict. Therefore the Memorial Coliseum should be considered. This, in 1956 is the sports arena with 80 per cent fixed seating capacity which lends itself poorly to the Society program operation. Discounting it as an assembly site it would accommodate about the current subscribed rate of technical exhibitors. He goes on to make considerable points with reference to this that all are somewhat negative.

Now as to Durham, I see no change in the complete inadequacy of the facilities to accommodate the present schedule of exhibiting. The proposed hall is identical with the proposals of 1955, which was then considered inadequate. In Durham, however, there is no place to serve a banquet requiring the seating of more than 450 people. We have experienced no affair that small in 15 years.

Now, as a matter of history, the Nominating Committee just prior to the one that just passed out of existence was unable to get its recommendation over and this was thrown to the Nominating Committee that has just gone out of existence and so that might set a precedent for doing so with the next Nominating Committee.

Thank you for the privilege.

We add Greensboro to it.

DR. BENTON: Are you ready for nominations from the floor?

SPEAKER REECE: Yes.

DR. BENTON: If the facilities of Greensboro should prove satisfactory to the proper authorities the Guilford County delegation would like to welcome you back to Greensboro in 1967.

SPEAKER REECE: Just one announcement by the Secretary.

SECRETARY STYRON: There are several members of the Nominating Committee who have not assembled as follows: Dr. Hooper, Dr. Whitley of Rocky Mount, Dr. John Burwell of Greensboro, Harvey Robertson of Salisbury, and George Gilbert of Asheville.

If any of those members of the Nominating Com-

mittee are here, will they please come immediately to the back of this room? We have some assembled but these are the ones who are absent.

SPEAKER REECE: First, we have this, we must take some action on this report of the Nominating Committee concerning the sites of Winston-Salem as first choice and Durham as second choice.

DR. BENTON: Greensboro has been nominated from the floor.

SPEAKER REECE: And Greensboro is a nomination from the floor.

Mr. Parliamentarian, what must I do?

PARLIAMENTARIAN PASCHAL: That is in order.

SPEAKER REECE: It is in order.

We have three places to consider.

DR. KERNODLE: Mr. President, I would like to make a motion that the site for the 1967 convention be left to the Executive Council to make arrangements at the next meeting in September.

(The motion was seconded.)

SPEAKER REECE: The motion has been made and seconded that this be left to the Executive Council.

DR. KERNODLE: Yes.

SPEAKER REECE: All in favor say "aye."

(A chorus of "ayes.")

Opposed "no."

(No response.)

So the motion is carried.

The result of the election: Dr. Raper is elected Councilor for the Tenth District.

Dr. McMillan, I understand you wish to be recognized.

DR. McMILLAN: Mr. Speaker, since I made my report on the Constitution and By-laws, it has been brought to my attention that the central secretary's office has been having quite a little bit of difficulty in collecting some of the dues and they would like to if possible change the method of collecting dues from the county society if they so wished, and that it be done from the central secretary's office in Raleigh.

I have just been approached on that subject since I made this report today and if it would be permissible I would like for Mr. Barnes, if it is agreeable to him, and if that is what they want, to state what advantage it would have.

I have scribbled out something here to add to the Constitution and By-laws and I would like to have it passed, if that is done, because, if it is not, it will be two years before this can be put into effect.

As I understand it it used to be and I think it is still true that these bills are sent out in November of each year and with an IBM machine in Raleigh it would have to be done as soon as possible if you want it put on.

Mr. Barnes, would you like to make some suggestion along those lines please, sir?

EXECUTIVE DIRECTOR BARNES: Mr. Speaker, this was discussed in the Council Meeting yesterday. It had not been on the agenda for the House of Delegates because it was just an idea that came up from some of the officials lately.

As you know we have the responsibility at the headquarters office of preparing the invoices for the membership dues and supplying those to the secretary-treasurers of the County Medical Societies for collection. We do that in November. Usually we find that a new secretary is elected in December, sometimes as late as January, and in one or two cases as late as February, and that the membership is not billed for dues at the beginning of the year as required by the Constitution and By-laws and that there is a great lag in the billing of membership for dues, both State Society and AMA. So that we have every spring the problem of a series of communications to the members to advise them as to the status of their standing with the result that we find many of them paid their dues as far back as December and they have not been transmitted and the council felt that there was some merit in considering assigning this responsibility of dues billing to the headquarters office.

We are not looking for any more work. We certainly have tasks enough as it is. But, if this would effect a more efficient way of billing the dues to the membership, we would be willing to implement some mechanical method of doing that and mailing the dues bills direct to the membership. I presume under that system that the returns on them, the remittances would come direct from the member back to the headquarters office and of course we would do the bookkeeping and accounting and the reporting of them as we do now.

It is a matter of what you all wish. We are servants of yours.

SPEAKER REECE: Dr. McMillan.

DR. McMILLAN: Mr. Speaker, I just wanted him to clarify and explain to you what it does and if it is passed I want to bring before this group some rewording of the By-laws.

VOICES: Read it.

SPEAKER REECE: Read it then, sir.

DR. McMILLAN: Amend Chapter XII of the By-laws and add a new Section 4 as follows:

In lieu of the above method for collecting dues, the Executive Council may authorize and empower the Executive Director to collect directly from individual members dues for the Society and at the request of any County Society, the dues of such County Society.

SPEAKER REECE: Do you move the adoption of that?

DR. McMILLAN: I would move the adoption of this recommendation.

It is a fact that it is brought to you for presen-

tation but under the By-laws you can vote on it now.

SPEAKER REECE: Dr. Johnson.

DR. HARRY JOHNSON: Mr. Chairman, I would like very much to second this motion.

Now, it has been my experience as Councilor for the Eighth District that there has been considerable trouble with collecting the dues, as Jim Barnes well knows.

The members of one society were not members of the AMA for one whole year for the simple reason of the collection of dues and I do not want to impose on time of this organization but I would like very much to see this sort of thing done.

SPEAKER REECE: The motion has been made and seconded.

Any further discussion?

(No response.)

All in favor say "aye."

(A chorus of "ayes.")

Opposed "no."

(Several "noes.")

I understand this must be acted on by the next session which is Tuesday.

I have one announcement to make.

(Announcement.)

DR. BLACKMON: Mr. Speaker, may I have the floor a moment?

SPEAKER REECE: Yes, sir.

DR. BLACKMON: I would like to present the following motion.

I move that next year the Constitution and By-laws Committee present to this House of Delegates the proper changes in the Constitution and By-laws to allow the various districts to nominate Councilors and Vice-Councilors at district meetings and to arrange for those who do not have district meetings to nominate their councilors and vice-councilors at a caucus at the House of Delegates meeting.

SPEAKER REECE: You have heard the motion. Is there a second.

(The motion was seconded.)

The motion has been made and seconded.

Dr. McMillan, did you understand that?

DR. McMILLAN: I would like to have a copy.

SPEAKER REECE: Will you give a copy to him?

Any discussion concerning this motion?

A MEMBER: Will this act as a presentation?

SPEAKER REECE: A presentation, yes.

A VOICE: This is the prime move. It will be submitted again on Tuesday.

SPEAKER REECE: In other words we will have to adopt it then, as I understand it.

All in favor say "aye."

(A chorus of "ayes.")

Opposed "no."

(Several "noes.")

So the motion is carried.

I am informed this completes all the business we have to transact this afternoon. A session will not be required tomorrow afternoon.

The second session of the House will be held Tuesday afternoon at 2:30 in this area.

A MEMBER: I move we recess.

SPEAKER REECE: There is a move to recess.

(The motion was seconded.)

All in favor say "aye."

(A chorus of "ayes.")

(The meeting of the House of Delegates recessed at six-thirty o'clock p.m.)

TUESDAY AFTERNOON SESSION
May 5, 1964

The Second Meeting of the House of Delegates convened at two fifty o'clock p.m., Speaker Reece presiding.

SPEAKER REECE: The House will please come to order.

This represents the second meeting of the House of Delegates.

(Announcement.)

Under unfinished business, item (a), the first resolutions, Committee on Resolutions Reference Committees, Ed Beddingfield.

DR. EDGAR T. BEDDINGFIELD, JR.: Mr. Speaker, the members of the House of Delegates. We have here four resolutions which have been recommended for adoption both by the Executive Council and by the various reference committees which have considered them since the first session.

I will not read these resolutions in their entirety unless requested from the floor to do so, but will describe them briefly and by title.

The first resolutions emanate from within our own society from the Committee on Venereal Diseases and this is a resolution, if passed by this House, which would be transmitted by our delegate to the AMA House of Delegates.

The sense of this resolution is that it expresses concern over the increasing number of cases of venereal diseases, in particular syphilis and gonorrhea and urges that the American Medical Association take official cognizance of the increase in the incidence of these diseases and initiate through appropriate channels of the AMA a comprehensive inquiry and recommendations for action.

I move, Mr. Speaker, the adoption of this resolution.

SPEAKER REECE: You have heard the motion for the adoption of this resolution. Is there a second?

(The motion was seconded.)

Any discussion?

(No response.)

All in favor say "aye."

(A chorus of "ayes.")

Opposed no.

(No response.)

So the motion is carried.

DR. BEDDINGFIELD: The second resolution emanates from the Lenoir-Green-Jones County Medical Society, this has been endorsed by the Executive Council and was read in the first meeting of the House of Delegates.

This is a request to the AMA Judicial Council and it is very short so I will read this one.

WHEREAS the ethical and legal limitations of physicians participating in court ordered pre-trial psychiatric examinations has not been clarified.

THEREFORE BE IT RESOLVED that the House of Delegates of the Medical Society of the State of North Carolina requests the House of Delegates of the American Medical Association to ask the AMA Judicial Council to rule on the ethical and the legal limitations of the physician participating in court ordered pre-trial psychiatric examinations when the accused or his legal representative have not requested it.

I move the adoption of this resolution.

SPEAKER REECE: You have heard the motion for the adoption of this resolution. Is there a second?

(The motion was seconded.)

All in favor say "aye."

(A chorus of "ayes.")

Opposed no.

(No response.)

The motion having carried it is so ordered.

DR. BEDDINGFIELD: The third resolution emanates from the North Carolina Dental Society in conjunction with our School Health Committee. This resolution is a little lengthy and which I will not read and the point of this resolution is that the school health fund which amounts to several hundreds of thousands of dollars a year and which is now administered by the Department of Education has not been surveyed as to the need for such a fund or whether the fund is meeting the purposes for which it was originally intended, and this resolution calls upon the Governor to appoint a commission to investigate the utilization of this school health fund and to make an appropriate recommendation, possibly for new legislation in the handling of this fund. This medical society would be included in the suggested membership of such an advisory commission to the Governor, as would the Dental Society, the Board of Health, the Board of Education, and other interested parties.

I move the adoption of this resolution.

SPEAKER REECE: You have heard the motion that this resolution be adopted. Is there a second?

(The motion was seconded.)

All in favor say "aye."

(A chorus of "ayes.")

Opposed no.

(No response.)

So the motion is carried.

DR. BEDDINGFIELD: The final resolution emanates from the American Medical Association. The purpose of this resolution is to petition the Congress to pass legislation legalizing the corporation-association type of tax shelter device which has recently been ruled illegal by the Internal Revenue Service to the net effect that self-employed individuals, in our case particularly, physicians, would share equal treatment with corporation executives as far as taxation on pension type plans is concerned.

I move the adoption of this resolution.

SPEAKER REECE: You have heard the motion for the adoption of this resolution. Is there a second?

(The motion was seconded.)

All in favor say "aye."

(A chorus of "ayes.")

The motion having carried it is so ordered.

DR. BEDDINGFIELD: That concludes our report.

SPEAKER REECE: At this time I would like to recognize Dr. Elias Faison for the presentation of a distinguished guest that we have in the house.

Dr. Faison.

DR. ELIAS FAISON: It gives me a great deal of pleasure to introduce to you Dr. Hugh Hussey, the Director of the scientific activities of the AMA. He talked to us this morning during the sessions on the role of AMA in drugs.

Dr. Hussey.

(Dr. Hussey arose: applause.)

SPEAKER REECE: I recognize our President, now, for a presentation.

PRESIDENT RHODES: Members of the House of Delegates, you have in your possession the 1964 Compilation of Annual Reports to the 110th Annual Session of the Medical Society of The State of North Carolina, which you received two weeks before this meeting.

I now move the adoption of this report as a whole.

(The motion was seconded.)

SPEAKER REECE: You have heard the motion and the second. All in favor say "aye."

(A chorus of "ayes.")

Opposed no.

(No response.)

So the motion is carried.

At this time I would like to recognize Dr. Roscoe McMillan.

DR. ROSCOE McMILLAN: Mr. Speaker I want to read for the second time, for a second reading to the House of Delegates a change in the By-Laws.

Item 2. Amend Chapter II, Section 1 of the By-Laws by adding a new sentence at the end of the Section to read as follows:

"The Executive Council shall recommend to the House of Delegates a time and place for the holding of each Annual Meeting of the Society."

I move, Mr. Speaker, the adoption of this amendment.

SPEAKER REECE: You have heard the motion.

(The motion was seconded.)

All in favor say "aye."

(A chorus of "ayes.")

Opposed no.

(No response.)

So the motion is carried.

CHAIRMAN McMILLAN: Item 3. Amend Chapter IV, Section 2 of the By-Laws by striking out the second sentence in line 9 of the Section and inserting in lieu thereof the following new sentence:

"In the case of component societies composed of members from more than one county, the delegates shall be apportioned to each county in accordance with the number of members residing in each county, and each component county shall be entitled to at least one delegate who shall be a member residing in that county, except as otherwise hereinafter provided."

I move, Mr. Speaker, the adoption of this amendment.

SPEAKER REECE: You have heard the motion. Is there a second?

(The motion was seconded.)

All in favor say "aye."

(A chorus of "ayes.")

Opposed no.

(No response.)

The motion having carried it is so ordered.

CHAIRMAN McMILLAN: Item 4. First Amend Chapter V, Section 3 by striking the period after the word "Council" and adding the phrase:

"at which time the function of such Nominating Committee shall cease."

I move the adoption of this amendment.

SPEAKER REECE: You have heard the motion that this amendment be adopted.

(The motion was seconded.)

All in favor say "aye."

(A chorus of "ayes.")

Opposed no.

(No response.)

The motion having carried it is so ordered.

CHAIRMAN McMILLAN: Item 5. Amend Chapter V, Section 2:

First: By inserting a sentence in line 4, following the word "district". to read as follows:

"the President-Elect shall be an ex officio non-voting member of the Committee."

I move, Mr. Speaker, the adoption of this amendment.

SPEAKER REECE: You have heard the motion. Is there a second?

(The motion was seconded.)

All in favor say "aye."

(A chorus of "ayes.")

Opposed no.

(No response.)

The motion having carried, it is so ordered.

CHAIRMAN McMILLAN: *Third*: Amend Section 2 at line 36 by the insertion of a period after the word "Constitution"; then by inserting a new sentence to read, "the nominations for the ten (district) Councilors, the ten (district) Vice-Councilors, and the Secretary shall be made each third year;" and thereby deleting the remainder of Section 2 which now reads, "and the members of the State Board of Health as provided in Article IX, Section 2."

I move the adoption of this amendment, Mr. Speaker.

SPEAKER REECE: You have heard the motion that this amendment be adopted. Second?

(The motion was seconded.)

All in favor say "aye."

(A chorus of "ayes.")

Opposed no.

(No response.)

The motion having carried, it is so ordered.

CHAIRMAN McMILLAN: Going back to Item 5, Second under that Item: By inserting in line 4 between the word "no" and the word "member" the word "other"; so the first phrase of the sentence will read:

"No other member of this Committee . . ."

I move the adoption of this amendment.

(The motion was seconded.)

SPEAKER REECE: All in favor say "aye."

(A chorus of "ayes.")

Opposed no.

(No response.)

The motion having carried, it is so ordered.

CHAIRMAN McMILLAN: Four: Amend Section 2 as firstly, secondly and thirdly amended above by the insertion of a parenthetical direction:

"(See Chapter X, Section 4.)"

I move the adoption of this amendment which simply directs attention to the duties of the Committee on Nominations to be stated in one single place in the By-Laws.

SPEAKER REECE: You have heard the motion. Second?

(The motion was seconded.)

All in favor say "aye."

(A chorus of "ayes.")

Opposed no.

(No response.)

The motion having carried, it is so ordered.

CHAIRMAN McMILLAN: Item 6. Amend Chapter VI, Section 2 by striking out the period at the end of the second sentence of said Section and add to the said sentence the following phrase:

"and a non-voting member of the Committee on

Nominations."

I move the adoption of this amendment.

SPEAKER REECE: Is there a second to this motion?

(The motion was seconded.)

All in favor say "aye."

(A chorus of "ayes.")

Opposed no.

(No response.)

The motion having carried, it is so ordered.

CHAIRMAN McMILLAN: Item 7. Amend Chapter X, Section 4; first in line 2, by deleting the word "appointed" and insert the word "elected."

This simply affirms what the House of Delegates does; it elects from caucus nominations, it does not appoint.

I move the adoption of this amendment.

SPEAKER REECE: Is there a second to the motion?

(The motion was seconded.)

All in favor say "aye."

(A chorus of "ayes.")

Opposed no.

(No response.)

The motion having carried, it is so ordered.

CHAIRMAN McMILLAN: *Secondly*: Amend Section 4, line 4, after the word "nominate" by inserting the phrase, "members of the State Board of Health as provided in Article IX, Section 2,"

I move the adoption of this amendment.

SPEAKER REECE: Is there a second?

(The motion was seconded.)

All in favor "aye."

(A chorus of "ayes.")

Opposed no.

(No response.)

The motion is carried.

CHAIRMAN McMILLAN: *Thirdly*: Amend Section 4, by deleting the last sentence, which begins, "they shall also . . ."

I move the adoption of this amendment.

SPEAKER REECE: Is there a second to this motion?

(The motion was seconded.)

All in favor say "aye."

(A chorus of "ayes.")

Opposed no.

(No response.)

The motion is carried.

CHAIRMAN McMILLAN: Mr. Speaker I have this which we read last time too after I presented the first one.

Amend Chapter XII of the By-Laws to add a new section, numbered as follows, number 4, in lieu of the above method of collecting dues the Executive Council may authorize and empower the Executive Director to collect directly from individual members dues for the Society and at the request of any county society the dues of such county society.

I move the adoption of this amendment.

SPEAKER REECE: You have heard this motion for adoption. Is there a second?

(The motion was seconded.)

A MEMBER: Would you repeat it?

(The amendment was repeated.)

DR. BLACKMON: Mr. Speaker may I ask a question?

Does that mean now that the member is going to be able to be a member of the state society without being a member of the county society?

SPEAKER REECE: It does not, as I understand it.

DR. BLACKMON: Thank you, sir.

SPEAKER REECE: You have heard the motion that this method of collecting dues be adopted. Is there a second to this?

(The motion was seconded.)

All in favor say "aye."

(A chorus of "ayes.")

Opposed no.

(Several "noes.")

The "ayes" have it. The motion is carried.

CHAIRMAN McMILLAN: Mr. Speaker, this ends the report of the Constitution and By-Laws Committee for this year.

DR. SMITH: Mr. Speaker, may I ask why Item 1 was omitted?

CHAIRMAN McMILLAN: That's on the Constitution, Dr. Smith.

DR. SMITH: I just wanted to bring it to your attention.

CHAIRMAN McMILLAN: We will vote on that next year.

Are you satisfied?

DR. SMITH: Yes.

SPEAKER REECE: I recognize Dr. Paschal.

DR. GEORGE PASCHAL, JR.: Mr. Speaker, since there were a few things that were not officially approved by this group relating to the President's Report of the Executive Council activities, I would like to make the following motion.

I move that the report of the Executive Council as made last Sunday and as then amended be adopted and approved, except as to the recommendations which were specifically rejected by the House of Delegates and except as to the recommendations for amending the Constitution and By-Laws which recommendations the Speaker ruled do not require any vote or action of the House of Delegates at this annual meeting, in which ruling this House of Delegates concurs.

SPEAKER REECE: You have heard the motion.

(The motion was seconded.)

And the second. All in favor say "aye."

(A chorus of "ayes.")

Opposed no.

(No response.)

The motion having carried, it is so ordered.

SPEAKER REECE: Item E, Report of the Committee to Review the Two Messages of the Presi-

dent. Dr. Poteat.

DR. HUBERT POTEAT, JR.: Mr. Speaker, House of Delegates. The two messages of the President have been received and heard with interest. The message to the House of Delegates concerning the activities of this society and the stewardship of the President is an account of dedicated service to the Medical Society of the State of North Carolina and the cause of organized medicine in bringing a high quality of medical care to all of the citizens of North Carolina.

The messages contain many constructive proposals and these are recommended to the Council and to the House of Delegates for consideration.

SPEAKER REECE: You have heard the report of the committee. Do we have a recommendation that it be accepted?

A MEMBER: I so move.

SPEAKER REECE: Second?

(The motion was seconded.)

All in favor say "aye."

(A chorus of "ayes.")

The motion having carried, it is so ordered.

Do we have any new business to come before the House of Delegates?

(No response.)

Any old business to be brought before the House of Delegates?

(No response.)

Without the presence of old and new business, do we have a motion for adjournment then?

DR. McMILLAN: I move we adjourn.

(A chorus of seconds.)

SPEAKER REECE: All in favor say "aye."

(A chorus of "ayes.")

It is in order that the House of Delegates adjourn.

(The meeting adjourned at three fifteen o'clock p.m.)

GENERAL SESSIONS

REPORT OF THE GENERAL SESSIONS GREENSBORO, NORTH CAROLINA

May 4-6, 1964

FIRST GENERAL SESSION

The First General Session was convened by President John S. Rhodes of Raleigh, N. C., 9:00 A.M., Monday, May 4, 1964. Invocation was rendered by Rabbi Joseph Asher of Greensboro, N. C.

President Rhodes introduced in sequence the speakers: Edward S. Organ, M.D., of Durham; James F. Glenn, M.D., of Durham; and, Kenneth H. Epple, M.D., of Greensboro. (The presentations of these speakers will have been submitted to the North Carolina Medical Journal for editorial disposition.)

President Rhodes introduced Robert A. Ross, M.D., of Chapel Hill, as moderator of the above panel of speakers on the subject of SYMPOSIUM ON HYPERTENSION. (The record of the panel presentations and discussions related thereto will have been submitted to the North Carolina Medical Journal for editorial disposition.)

President Rhodes recognized Robert L. Garrard, M.D., Greensboro, as the next introducer. Dr. Garrard introduced Edward L. Bortz, M.D., of Philadelphia for an address on "Objectives in Mental Health." (Dr. Bortz's address will have been submitted to the North Carolina Medical Journal for editorial disposition.) President Rhodes paid marked tribute to the address of Dr. Edward L. Bortz, after which he relinquished the Chair to Secretary Charles W. Styron, M.D., of Raleigh. Dr. Styron presented President John S. Rhodes for his annual President's Address. (The address will have been submitted to the North Carolina Medical Journal for editorial disposition.)

Secretary Charles W. Styron, M.D., adjourned the Session at 12:00 noon.

SECOND GENERAL SESSION MAY 5, 1964

The Second General Session was convened by President John S. Rhodes of Raleigh at 9:00 A.M., Tuesday, May 5, 1964. President Rhodes recognized and relinquished the Chair to Vice President Fred Patterson of Chapel Hill.

Upon assuming the Chair, Dr. Patterson presented Dan Martin, M.D., of Chapel Hill, who addressed the Session on the subject "The Problem of Periodic Health Examinations." (The presentation will have been submitted to the North Carolina Medical Journal for editorial disposition.)

Vice President Patterson introduced Floyd W. Denny, M.D., Chapel Hill, who presented an address related to Dr. Martin's address, extending the subject into "A Description of Methods for the Maintenance of Good Health in People Whom We See As Physicians." (This address will have been submitted to the North Carolina Medical Journal for editorial disposition.)

Vice President Patterson introduced James Spencer, M.D., Assistant Director of the American College of Surgeons, Chicago, who addressed the Session on the subject ORGANIZATION OF EMERGENCY ROOM IN GENERAL HOSPITALS. (This address will have been submitted to the North Carolina Medical Journal for editorial disposition.)

The Session recessed after which Vice President Patterson reconvened the Sessions and recognized Amos N. Johnson, M.D., of Garland.

Dr. Amos Johnson introduced Hugh H. Hussey, M.D., Director of the Division of Scientific Affairs of American Medical Association, who presented an address on the subject THE AMA'S PROGRAM IN DRUGS. (This address will have been submitted to the North Carolina Medical Journal for editorial disposition.)

Vice President Patterson recognized and introduced a panel of speakers related to a Clinical Pathological Conference participated in by William W. McLendon, M.D., Greensboro pathologist, and Glenn Sawyer, M.D., Professor of Medicine, Winston-Salem, following which Conference Dr. Sawyer recognized Elbert D. Apple, M.D., of Greensboro, who participated in the discussions of the panel. (The report of the Conference will have been submitted to the North Carolina Medical Journal for editorial disposition.)

President John S. Rhodes assumed the Chair and gave suitable expression to the Clinical Pathological Conference panel and discussants, after which the Session was adjourned at 12:45 o'clock P.M.

THE BANQUET SESSION, MAY 5, 1964

The President's Dinner Session convened at 7:00 o'clock P.M., Tuesday, May 5, 1964, at the Plantation Supper Club, Greensboro, with President John S. Rhodes presiding. As Master of Ceremonies, President Rhodes recognized W. Howard Wilson, M.D., of Raleigh, who introduced Rev. David V. Guthrie of Greensboro for the invocation. The invocation was suitably rendered, after which Chairman Wilson recognized the principle participants and guests of the President and his dinner party. Dr. Donald B. Koonce was recognized and in respect and duty presented the President's Jewel to President John S. Rhodes, after which President Rhodes expressed his appreciative acceptance of the jewel.

Chairman Wilson presented the guest speaker of the evening in the person of Charles W. Jarvis, D.D.S., San Marcos, Texas, who presented a most amusing and inspirational address to the President's guests and audience members and their wives. Dr. Jarvis is recognized as a keen and delightful entertainer and is held in great demand throughout the nation to whence he speaks frequently and far and wide. The persistent record of laughter throughout Dr. Jarvis' address was rewarding to the Committee on Arrangements and Scientific Works.

Chairman Wilson recognized President John S. Rhodes who paid tribute to Dr. Jarvis for his address and entertainment after which he recognized a special-table-group of close friends and relatives who were his guests as President.

President Rhodes recognized President-Elect Theodore Sidney Raiford, M.D., who came for the administration of the oath of office as President of the Medical Society. (The Society oath was properly administered.)

President Theodore S. Raiford presented a sequence of remarks related to his tenure of office after which Chairman Wilson resumed the Chair.

Chairman Wilson recognized Hugh H. Hussey, M.D., of the American Medical Association, who made suitable remarks in regard to the hospitality of the Society.

With due recognition for the effective levity created for the banqueteers of the evening by Dr. Charles Jarvis and with great tribute to him, Chairman Wilson amused the audience with suitable determinating levity, grace and final recognizing of Past President Rhodes, who suitably adjourned the Banquet Session at 9:10 o'clock P.M.

THIRD GENERAL SESSION
WEDNESDAY, MAY 6, 1964

Vice President William F. Hollister, of Pinehurst, convened the Third General Session of the Society at 9:30 o'clock A.M., May 6, 1964, and recognized Lenox D. Baker, M.D., of Durham, to convene and preside over the *Coinjoint Session with the North Carolina State Board of Health* as required by Statute. Dr. Baker assumed the chair as President of the State Board of Health and with due explanatory remarks introduced Dr. J. W. Roy Norton who reported extensively upon the function and the activities of the State Board of Health. (This report is published in the Biennial Reports of the State Board of Health which is available for general distribution as published.) Dr. Lenox Baker relinquished the Chair to Vice President Hollister at the conclusion of the Conjoint Session and adjourned same, upon which he reconvened the Third General Session and recognized Lester A. Crowell, Jr., M.D., of Lincolnton, as Chairman of the Committee on Scientific Awards from whom it was announced in absentia that the Committee had reviewed all papers and found none qualitatively or quantitatively of significant eligibility to make either the Moore County, Wake County or the Gaston County Awards.

Vice President Hollister recognized Harry B. Underwood, M.D. Dr. Underwood, as Chairman of the Committee on American Medical Association Medical Education and Research Foundation proceeded to give call to the respective Deans of the Medical Schools at Bowman Gray, Duke and University of North Carolina in reference to AMERF grants to these respective schools in support of medical education. Checks in granted funds were presented as follows:

Bowman Gray School of Medicine	$6,834.08
Duke University School of Medicine	$8,740.20
University of North Carolina School of Medicine	$6,968.00

Vice President Hollister recognized John S. Rhodes, M.D., who presented in suitable tribute FIFTY YEAR Certificates and Pins to the accrued members who had practiced medicine for fifty years, as follows:

Charles Wallace Armstrong, M.D.	Salisbury
Oscar Reid Black, M.D.	Landis
Forest D. Edwards, M.D.	(posthumously)
Lokie Melton Futrell, M.D.	(posthumously)
Phillip Palmer Green, M.D.	Pinehurst
Samuel Walker Hurdle, M.D.	Winston-Salem
William Herbert Kibler, M.D.	Morganton
Edgar Powell Norfleet, M.D.	Roxobel
Karl Busbee Pace, M.D.	Greenville
Sheldon Asa Saunders, M.D.	Aulander
Charles Ray Sharpe, M.D.	Lexington
David Bryan Sloan, M.D.	Wilmington
George Marvin Smith, M.D.	Monroe

Vice President Hollister introduced Russell B. Roth, M.D., of Erie, Pa., as Guest Speaker.

Dr. Roth addressed the General Session on the subject of the Report of the Commission on the Cost of Medical Care as a member of said Commission and as a member of the American Medical Association Council on Medical Services. (This address will have been submitted to the North Carolina Medical Journal for editorial disposition.)

Vice President Hollister introduced W. Reece Berryhill, M.D., Chapel Hill, as Dean of the University of North Carolina Medical School.

Dr. Berryhill addressed the Session on the subject, "Medical Education, Past, Present and Future." (This address will have been submitted to the North Carolina Medical Journal for editorial disposition.)

Vice President Hollister introduced Theodore S. Raiford, M.D., President of the Medical Society for his Presidential Address. (This address will have been submitted to the North Carolina Medical Journal for editorial disposition.)

Vice President Hollister called for nominations

to be elected for four year tenures to the Editorial Board of the North Carolina Medical Journal and recognized Secretary Charles W. Styron of Raleigh.

Dr. Styron placed in nomination the following: John S. Rhodes, M.D., T. S. Raiford, M.D., and E. W. Furgurson, M.D. Other nominations were not forthcoming on call. On motion, duly seconded and being put the nominees were elected by acclamation and so declared by Vice President Hollister.

Vice President Hollister announced the requirments to election two members of the North Carolina Board of Medical Examiners for terms of six years each, election to be by written ballot. The Chairman appointed Fred Patterson, M.D., and J. C. Green, M.D., as tellers, whereupon he called for nominations from the floor:

1. Dr. M. D. Bonner, upon recognition, nominated Frank Edmondson of Asheboro to succeed himself to a six-year term.
2. Dr. J. B. Edwards, upon being recognized, nominated Ralph G. Templeton, of Lenoir, to succeed himself to a term of six years.

On motion of Dr. William A. Sams, duly seconded, the General Session suspended the rules and proceeded by standing vote, in excess of a two-thirds majority of those present and voting, as reported by tellers Patterson, Raiford and Styron, to elect the nominees Edmondson and Templeton by acclamation for six-year terms each. The Chairman declared the motion carried under the rules and declared the election of Dr. Frank Edmondson and Dr. Ralph Templeton for six-year terms on the North Carolina Board of Medical Examiners.

Vice President Holister recognized Immediate Past President John S. Rhodes.

Past President Rhodes proceeded to install the following officers of the Society as elected by the House of Delegates at the Present Annual Session:

George W. Paschal, M.D., President-Elect.

Hubert McN. Poteat, Jr., M.D., Vice President.

Wayne J. Benton, M.D., Vice-President.

John C. Reece, M.D., Speaker of the House of Delegates.

D. Ernest Ward, M.D., Vice Speaker of the House of Delegates.

Donald B. Koonce, M.D., Delegate to AMA.

John R. Kernodle, M.D., Delegate to AMA.

Even Alexander, M.D., Alternate Delegate to AMA.

George T. Wolff, M.D., Alternate Delegate to AMA.

Thomas P. Brinn, M.D., First District Councilor, 3-year term.

William H. Romm, M.D., First District Vice Councilor, 3-year term.

Lynwood E. Williams, M.D., Second District Councilor, 3-year term.

Ernest W. Larkin, M.D., Second District Vice Councilor, 3-year term.

Dewey H. Bridger, M.D., Third District Councilor, 3-year term.

Frank R. Reynolds, M.D., Third District Vice Councilor, 3-year term.

Edgar T. Beddingfield, M.D., Fourth District Councilor, 3-year term.

Harry H. Weathers, M.D., Fourth District Vice Councilor, 3-year term.

Harry H. Summerlin, M.D., Fifth District Councilor, 3-year term.

Charles A. S. Phillips, M.D., Fifth District Vice Councilor, 3-year term.

John Glasson, M.D., Sixth District Councilor, 3-year term.

Fred G. Patterson, M.D., Sixth District Vice Councilor, 3-year term.

David G. Welton, M.D., Seventh District Councilor, 3-year term.

Charges LeG. Stuckey, M.D., Seventh District Vice Councilor, 3-year term.

Louis deS. Shaffner, M.D., Eighth District Councilor, 3-year term.

Claude A. McNeill, Jr., M.D., Eighth District Vice Councilor, 3-year term.

Thos. L. Murphy, M.D., Ninth District Councilor, 3-year term.

Paul McN. Deaton, M.D., Ninth District Vice Councilor, 3-year term.

James Raper, M.D., Tenth District Councilor, 3-year term.

Walter Otis Duck, M.D., Tenth District Vice Councilor, 3-year term.

Vice President Hollister thanked Dr. Rhodes for his final action in installing these officers, whereupon he recognized President T. S. Raiford, who had been installed into office the evening prior.

Dr. Raiford, who made simple departing remarks for the good of the Society, and quoted the following: "No matter how good a warrior a chief may be, he cannot do battle without his Indians," and expressed the hope that all members "will be my Indians."

Vice President Hollister announced the awarding of attendance prizes to follow the adjournment and then declared: "I now declare this 10th Annual Session of the Medical Society of the State of North Carolina adjourned Sine die"; so with the pounding of the gavel the Sessions were adjourned at 12:20 o'clock P.M., May 6, 1964.

Sine die

EARLY HISTORY OF THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA FROM ORGANIZATION TO 1804

Date	Place	President	Vice Presidents	Corresponding Secretary	Secretary	Recording Secretary	Treasurer	Censors
Dec. 17, 1799 or April 16 1800	Raleigh	Richard Fenner	Nathaniel Loomis John Claiborne	Calvin Jones		Wm. B. Hill	Cargill Massenburg	Sterling Wheaton James Webb Jas. John Pasteur Jason Hand
Dec. 1, 1800	Raleigh	Richard Fenner			Sterling Wheaton			
Dec. 1 1801	Raleigh	John C. Osborne	Thomas Mitchell Richard Fenner	Calvin Jones	Sterling Wheaton		Cargill Massenburg	James Webb John Sibley
1802	Raleigh	John C. Osborne		Calvin Jones				
1803	Raleigh	John C. Osborne		Calvin Jones				
1804	Raleigh	John C. Osborne		Calvin Jones				

HISTORY OF THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA FROM 1949 TO 1964

*Missing Data Not to be Found in Record

	Date	Place of Meeting	Number in Attendance	President	Vice Presidents*	Secretary	Treasurer*	Members on Roll*	Honorary Members*	Honorary Fellows*
	1849	Raleigh	25	F. J. Hill		W. H. McKee		25		
1	1850	Raleigh	21	E. Strudwick	F. J. Haywood, C. E. Johnson, J. E. Williamson, W. G. Thomas	W. H. McKee	W. G. Hill	38	9	
2	1851	Raleigh	23	E. Strudwick	C. E. Johnson	W. H. McKee	W. G. Hill	46	0	
3	1852	Wilmington	38	J. E. Williamson	Thomas N. Cameron, William G. Hill, Johnston B. Jones, N. J. Pittman	E. B. Haywood	J. J. W. Tucker	72	12	
4	1853	Fayetteville	24	J. E. Williamson	William G. Hill, Johnston B. Jones, J. B. G. Myers, N. J. Pittman	W. W. Harris	Daniel Dupree	80	14	
5	1854	Raleigh	37	J. H. Dickson	N. J. Pittman, J. B. G. Myers, J. Graham Tull, A. D. McLean	S. S. Satchwell	Daniel Dupree	84	17	
6	1855	Salisbury	23	J. H. Dickson	J. Graham Tull, Owen Hadley, A. D. McLean, Hugh Kelly	S. S. Satchwell	J. B. Dunn	96	18	
7	1856	Raleigh	35	C. E. Johnson	Marcellus Whitehead, T. R. Gibson, Johnston B. Jones, O. F. Manson	S. S. Satchwell	J. B. Dunn	101	22	
8	1857	Edenton	25	C. E. Johnson	Marcellus Whitehead, O. F. Manson, H. W. Faison, E. T. Gibson	W. G. Thomas	J. B. Dunn	113	16	
9	1858	New Bern	69	W. H. McKee	Edward Warren, C. W. Graham, Caleb Winslow, A. B. Pierce	W. G. Thomas	J. B. Dunn	172	18	
10	1859	Statesville	81	W. H. McKee	James G. Ramsey, P. E. Hines, J. R. Mercer, W. T. Howard	W. G. Thomas	C. W. Graham			
11	1860	Washington	64	N. J. Pittman	P. C. Henry, R. H. Winborne, M. Whitehead, T. S. Leach	W. G. Thomas	C. W. Graham	233	18	
12	1861	Morganton	23	N. J. Pittman	J. J. Summerell, C. T. Murphy, G. W. Hodges, W. A. B. Norcom	W. G. Thomas	C. W. Graham	244	18	
13	1866	Raleigh	20	J. J. Summerell	F. Burke Haywood, R. H. Winborne, W. J. Barrow, J. W. Jones	W. G. Thomas S. S. Satchwell	C. W. Graham C. W. Graham	288	11	
14	1867	Tarboro	41	W. G. Thomas						
15	1868	Warrenton	27	S. S. Satchwell	Hugh Kelly, George A. Foote, Charles J. O'Hagan, J. H. Baker	Thomas F. Wood	J. W. Jones			
16	1869	Salisbury	36	F. B. Haywood	Thomas E. Wilson, A. B. Pierce, C. T. Murphy, M. A. Locke	Thomas F. Wood	J. W. Jones			
17	1870	Wilmington	38	C. J. O'Hagan	F. A. Anderson, F. N. Luckey, W. R. Sharpe, R. L. Payne	Thomas F. Wood	J. W. Jones			
18	1871	Raleigh	35	Hugh Kelley	D. N. Patterson, R. C. Pearson, J. B. Seavy, G. I. Kirby	Thomas F. Wood	J. W. Jones			
19	1872	New Bern	34	W. G. Hill	H. W. Faison, R. J. Hicks, G. H. Macon, W. A. B. Norcom	James McKee	J. W. Jones			
20	1873	Statesville	43	M. Whitehead	W. T. Emett, William Little, Charles Duffy, P. T. Jerman	James McKee	H. T. Bahnson			
21	1874	Charlotte	56	W. A. B. Norcom	J. B. Jones, R. F. Lewis, C. G. Cox, J. L. Knight	James McKee	H. T. Bahnson			
22	1875	Wilson	60	J. W. Jones	Walker Debnam, J. A. Gibson, William Little, D. N. Patterson	James McKee	H. T. Bahnson	148	5	
23	1876	Fayetteville	33	Peter E. Hines	J. H. Baker, G. G. Smith, T. D. Haigh, J. K. Hall	James McKee	H. T. Bahnson	157	4	
24	1877	Salem	42	George A. Foote	J. K. Hall, B. W. Robinson, A. Holmes, A. A. Hill	James McKee	A. G. Carr	177	4	
25	1878	Goldsboro	79	R. L. Payne	E. M. Rountree, Richard Anderson, S. B. Flowers, L. A. Stith	I. J. Picot	A. G. Carr	194	6	
26	1879	Greensboro	106	Chas. Duffy, Jr.	J. A. Gibson, Willis Alston, James McKee, A. A. Hill	L. J. Picot	A. G. Carr	198	6	
27	1880	Wilmington	105	J. F. Shaffner	J. K. Hall, W. C. McDuffie, W. R. Wilson, R. F. Lewis	L. J. Picot	A. G. Carr	225	6	
28	1881	Asheville	92	R. B. Haywood	J. E. McRee, W. H. Lilly, R. H. Speight, W. J. H. Bellamy	L. J. Picot	A. G. Carr	254	6	
29	1882	Concord	65	Thos. F. Wood	T. J. Moore, D. J. Cain, S. E. Evans, John McDonald	L. J. Picot	A. G. Carr	297	7	
30	1883	Tarboro	112	J. K. Hall	A. W. Knox, J. M. Hadley, E. S. Foster, John Whitehead	L. J. Picot	A. G. Carr	310	7	
31	1884	Raleigh	112	A. B. Pierce	F. W. Potter, G. W. Graham, R. Dillard, G. W. Long	L. J. Picot	A. G. Carr	348	7	
32	1885	Durham	173	W. C. McDuffie	James McKee, T. E. Anderson, W. H. Whitehead, A. G. Carr	W. C. Murphy	R. L. Payne, Jr.	424	6	

HISTORY OF THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA FROM 1849 to 1964—Continued

*Missing Data Not to be Found in Record

	Date	Place of Meeting	Number in Attendance	President	Vice Presidents	Secretary	Treasurer	Members on Roll July 15	Honorary Members	Honorary Fellows*
33	1886	New Bern	113	Joseph Graham	H. T. Bahnson, L. J. Picot, J. L. McMillan, W. W. Faison	J. M. Baker	R. L. Payne, Jr.	438	7	-----
34	1887	Charlotte	112	H. T. Bahnson	G. G. Smith, J. L. Nicholson, C. M. Van Poole, H. B. Ferguson	J. M. Baker	R. L. Payne, Jr.	452	7	-----
35	1888	Fayetteville	133	T. D. Haigh	W. T. Ennett, J. A. Dunn, T. E. Anderson	J. M. Baker	C. M. Van Poole	306	6	----
36	1889	Elizabeth City	50	W. T. Ennett	W. J Jones, S. W. Stevenson G W. Long	J. M. Baker	C. M. Van Poole	410	6	--
37	1890	Oxford	160	G. G. Thomas	R. L. Payne, Jr., Richard Dillard, S. D. Booth	J. M. Hays	C. M. Van Poole	414	6	-----
38	1891	Asheville	135	R. H. Lewis	S. W. Battle, J. L. Nicholson, W. H. Lilly	J. M. Hays	C. M. Van Poole	422	6	-----
39	1892	Wilmington	162	W. T. Cheatham	T. S. Burbank, J. W. Long, W. H. H. Cobb, W. D. Hillard	J. M. Hays	C. M Van Poole	431	6	-----
40	1893	Raleigh	221	J. W. McNeill	W. C. Galloway H H Harris, J M Hadley, Thomas Hill	R. D. Jewett	M. P. Perry	447	5	3
41	1894	Greensboro	166	W. H. H. Cobb	J. A. Hodges, R. W. Tate, Willis Alston M. H. Fletcher	R. D. Jewett	M. P. Perry	454	5	3
42	1895	Goldsboro	----	J. H. Tucker	J. Howell Way, W. H. Harrell, O McMullan, C A Misenheimer	R. D. Jewett	M. P. Perry	436	7	3
43	1896	Winston-Salem	158	R. L. Payne	S. D Booth, J P Monroe I A Burroughs, J E Grimsley	R. D Jewett	M. P. Perry	452	7	3
44	1897	Morehead City	103	P. L. Murphy	J. C. Walton, A A Kent, M R Adams, B. L Long	R. D. Jewett	M P Perry	406	6	3
45	1898	Charlotte	*	rancis Duffy	E. C. Register, A T Cotton, I H B Knight, F. H Russell	R D Jewett	M. P Perry	437	6	21
46	1899	Asheville	152	L. J Picot	I. W Faison, J. W White H H Dodson, W C Brownson	Geo W Presley	G T Sikes	489	6	16
47	1900	Tarboro	115	George W. Long	C. M. Van Poole, James M. Parrott, T. B. Williams, W. D. Hilliard	Geo. W. Presley	G. T. Sikes	482	6	21
48	1901	Durham	186	Julian M. Baker	M. H. Fletcher, C. A. Julian, D. A Stanton, E. M Summerell	Geo. W. Presley	G. T. Sikes	515	5	18
49	1902	Wilmington	147	Robert S. Young	A. G Carr, E. D. Dixon-Carroll, I M. Taylor, J. M. Parrott	Geo. W. Presley	G. T. Sikes	546	5	20
50	1903	Hot Springs	155	A. W. Knox	E. G. Moore C. A. Julian, W. W. McKenzie, J. L. Nicholson	J. Howell Way	G. T. Sikes	530	6	19
51	1904	Raleigh	326	H. B. Weaver	John Hey Williams John C. Rodman, S. F. Pfohl	J. Howell Way	G T. Sikes	1,033	8	17
52	1905	Greensboro	361	David T. Tayloe	C. A. Julian, John T. Burrus, I. W. Faison	J. Howell Way	G. T. Sikes	1,175	8	17
53	1906	Charlotte	406	E. C. Register	L. B. McBrayer W. H. Cobb, Jr., W. O. Spencer	J. Howell Way	G. T. Sikes	1,234	8	16
54	1907	Morehead City	217	Samuel D. Booth	C. M Strong, J E. McLaughlin, W. F. Hargrove	David A. Stanton	H. McK. Tucker	888	7	16
55	1908	Winston-Salem	372	J. Howell Way	J. E. Stokes, J. A. Turner, W. H. Dixon	David A. Stanton	H. McK. Tucker	998	7	28
56	1909	Asheville	337	J. F. Highsmith	C. M. Van Poole, D. A. Garrison, D. O Dees	David A. Stanton	H. McK. Tucker	1 067	7	25
57	1910	Wrightsville Beach	276	J A Burroughst E. J. Wood	E. J. Wood John Q. Myers, L. D. Wharton	David A. Starton	H. D. Walker	1,080	8	35
58	1911	Charlotte	412	C. M. Van Poole	J. V McGougan, W. E. Warren L. N. Glenn	David A. Stanton	H. D. Walker	880	8	45
59	1912	Hendersonville	296	A. A. Kent	J. P. Monroe, W. P. Horton J. G. Murphy	David A. Stanton	H. D Walker	950	8	44
60	1913	Morehead City	232	J. P. Munroe	F. R. Harris, E S. Bullock, L. B. Morse.	John A. Ferrell	H D. Walker	1,133	8	40
61	1914	Raleigh	431	J. M. Parrott	E. T Dickinson, J. T J. Battle, D. E. Sevier	John A. Ferrell	H. D. Walker	1,228	8	47
62	1915	Greensboro	443	L. B. McBrayer	J. J. Phillips, C. W Moseley, S. M. Crowell	John A. Ferrell	H. D. Walker	1,221	9	68
63	1916	Durham	406	M. H. Fletcher	J. L. Nicholson, L. N. Glenn, W. H. Hardison	Benj. K. Hays	W. M. Jones	1,228	10	79
64	1917	Asheville	280	Charles O'H Laughinghouse	D. J. Hill, J. L. Spruill, J. H. Shuford	Benj. K Hays	W. M. Jones	1,271	11	81
65	1918	Pinehurst	291	I. W. Faison	Wm. deB. MacNider Jos B Greene, Ben F. Royal	Benj. K. Hays	W. M. Jones	1,087	11	81
66	1919	Pinehurst	335	Cyrus Thompson	J. W. Halford, T. W. Davis, A. McN Blair	Sec.-Treas. Benj. K. Hays	Acting Sec.-Treas L. B McBrayer	1,306	11	100
67	1920	Charlotte	470	C. V. Reynolds	H. D. Walker F. Stanley Whitaker Thos. I. Fox	Benj. K. Hays	L. B. McBrayer	1,497	12	100
68	1921	Pinehurst	404	T. E. Anderson	C. S. Lawrence, W. H Ward, J. M. Manning	Benj. K Hays	L. B McBrayer	1,491	12	93
69	1922	Winston-Salem	507	H. A. Royster	W. T. Parrott, B. C. Nalle, J. R McCracken		Sec.-Treas. L. B. McBrayer	1,571	12	100
70	1923	Asheville	356	J. W. Long	F. M. Hanes, T. C. Johnson, B. L. Long		L. B. McBrayer	1,592	9	101
71	1924	Raleigh	525	J. V. McGougan	J. L. Spruill,‡ Eugene B Glenn, D. A. Garrison		L. B. McBrayer	1,604	9	106
72	1925	Pinehurst	550	Albert Anderson	W. L. Dunn, A. E. Bell, K. G. Averitt		L. B. McBrayer	1,657	10	116
73	1926	Wrightsville Beach	445	Wm. deB. MacNider	J. P. Matheson, W. W. Dawson, H. H. Bass		L. B. McBrayer	1,663	10	107
74	1927	Durham	653	John Q. Myers	J. W. Carroll, A. Y. Linville, C. H. Cocke		L. B. McBrayer	1,691	10	121
75	1928	Pinehurst	611	John T. Burrus	G. H. Macon, R. F. Leinbach, W. R. Griffin		L. B. McBrayer	1,738	11	143
76	1929	Greensboro	671	Thurman D. Kitchin	W. L. Dunn,‡ Asheville, D. T. Tayloe, Jr., Washington. W. D. James, Hamlet		L. B. McBrayer	1,666	11	146
77	1930	Pinehurst	701	L. A. Crowell	W. B. Murphy, Wm. E. Warren, N. B. Adams		L. B. McBrayer	1,711	11	155

HISTORY OF THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA FROM 1849 to 1964—Continued

	Date	Place of Meeting	Number in Attendance	President	President-Elect	Vice Presidents	Sec.-Treas	Members on Roll July 15	Honorary Members	Life Members
78	1931	Durham	714	J. G. Murphy	M. L. Stevens	C. A. Julian, Greensboro J. W. Davis, Statesville	L. B. McBrayer	1,600	10	164
79	1932	Winston-Salem	740	M. L. Stevens	Jno. B. Wright	C. W. Banner, Greensboro W. W. Sawyer, Elizabeth City	L. B. McBrayer	1,559	10	166
80	1933	Raleigh	714	Jno. B. Wright	I. H. Manning	J. R. McCracken, Waynesville	L. B. McBrayer	1,363	10	181
81	1934	Pinehurst	728	I. H. Manning	P. P. McCain	W. G. Suiter, Weldon R. I. Felts, Durham	L. B. McBrayer	1,563	10	210
82	1935	Pinehurst	706	P. P. McCain	Paul H. Ringer	H. D. Walker, Elizabeth City J. F. McKay, Buie's Creek	L. B. McBrayer	1,619	10	215
						William Allan, Charlotte				
83	1936	Asheville	583	Paul H. Ringer	C. F. Strosnider	J. K. Pepper, Winston-Salem E. S. Bullock, Wilmington	L. B. McBrayer	1,462	10	235
84	1937	Winston-Salem	767	C. F. Strosnider	Wingate M. Johnson	C. A. Woodard, Wilson Jno. F. Brownsberger, Fletcher	L. B. McBrayer	1,503	7	253
85	1938	Pinehurst	802	Wingate M. Johnson	J. Buren Sidbury	R. B. McKnight, Charlotte J. F. Abel, Waynesville	T. W. M. Long	1,715	7	284
86	1939	Cruise to Bermuda	319	J. Buren Sidbury	William Allan	C. B. Williams, Elizabeth City M. D. Hill, Raleigh	T. W. M. Long	1,605	8	313
87	1940	Pinehurst	835	William Allan	Hubert B. Haywood	F. Webb Griffith, Asheville Frank C. Smith, Charlotte	T. W. M. Long	1,661	7	311
88	1941	Pinehurst	755	Hubert B. Haywood	F. Webb Griffith	D. W. Holt, Greensboro T. C. Kerns, Durham	T. W. M. Long (1) I. H. Manning	1,700	7	309
89	1942	Charlotte	710	F. Webb Griffith	Donnel B. Cobb	Thos. DeL. Sparrow, Charlotte T. L. Carter, Gatesville	Roscoe D. McMillan	1,837	8	350
90	1943	Raleigh	736	Donnell B. Cobb	James W. Vernon	George S. Coleman, Raleigh Julian Moore, Asheville	Roscoe D. McMillan	1,919	8	361
91	1944	Pinehurst	760	James W. Vernon	Paul F. Whitaker	Fred C. Hubbard, North Wilkesboro George L. Carrington, Burlington	Roscoe D. McMillan	1,982	8	383
	1945	No meeting because of O.D.T. restrictions	...	Paul F. Whitaker	Oren Moore	Wm. H. Smith, Goldsboro Zack D. Owens, Elizabeth City	Roscoe D. McMillan	1,811	7	383
92	1946	Pinehurst	889	Oren Moore		Wm. H. Smith, Goldsboro‡ Zack D. Owens, Elizabeth City	Roscoe D. McMillan	1,939	6	397
93	1947	Virginia Beach, Va.	444	Wm. M. Coppridge	Frank A. Sharpe	G. E. Bell, Wilson J. B. Bullitt, Chapel Hill	Roscoe D. McMillan	2,191	7	404
94	1948	Pinehurst	920	Frank A. Sharpe (2)	James F. Robertson	V. K. Hart, Charlotte J. G. Raby, Tarboro	Roscoe D. McMillan	2,298	8	407
95	1949	Pinehurst	998	James F. Robertson	G. Westbrook Murphy	Joseph J. Combs, Raleigh Joseph A. Elliott, Charlotte	Roscoe D. McMillan	2,318	5	405
96	1950	Pinehurst	947	G. Westbrook Murphy	Roscoe D. McMillan	Ben F. Roval Joseph A. Elliott	Millard D. Hill	2,283	5	455
97	1951	Pinehurst	938	Roscoe D. McMillan	Frederic C. Hubbard	Joseph A. Elliott Henderson Irwin	Millard D. Hill	2,341	5	469
98	1952	Pinehurst	969	Frederic C. Hubbard	J. Street Brewer	Forest M. Houser Arthur Daughtridge	Millard D. Hill	2,326	5	476
99	1953	Pinehurst	1016	J. Street Brewer	Joseph A. Elliott	George W. Paschal John R. Bender	Millard D. Hill	2,673	5	486
100	1954	Pinehurst	1077	Joseph A. Elliott	Zack D. Owens	John F. Foster Julian A. Moore	Millard D. Hill	2,801	6	486
101	1955	Pinehurst	991	Zack D. Owens	J. P. Rousseau	George W. Paschal, Jr. Elias S. Faison	Millard D. Hill	2,896	6	507
102	1956	Pinehurst	1022	James P. Rousseau	Donald B. Koonce	E. W. Schoenheit Milton S. Clark	Millard D. Hill	3,058	7	561
103	1957	Asheville	867	Donald B. Koonce	Edward W. Schoenheit	John S. Rhodes O. Norris Smith	Millard D. Hill	3,127	8	522
104	1958	Asheville	781	Edw. W. Schoenheit	Lenox D. Baker	George W. Holmes Amos N. Johnson	Millard D. Hill	3,171	9	542
105	1959	Asheville	651	Lenox D. Baker	John C. Reece	Amos N. Johnson Kenneth B. Geddie	John S. Rhodes	3,211	10	251
106	1960	Raleigh	848	John C. Reece	Amos N. Johnson	Charles M. Norfleet, Jr. W. Walton Kitchin	John S. Rhodes	3,247	12	472
107	1961	Asheville	636	Amos N. Johnson	Claude B. Squires	Theodore S. Raiford Charles T. Wilkinson	John S. Rhodes	3,248	12	438
108	1962	Raleigh	745	Claude B. Squires	John R. Kernodle	John A. Payne, III J. Sam Holbrook	John S. Rhodes	3,339	9	425
109	1963	Asheville	714	John R. Kernodle	John S. Rhodes	H. Fleming Fuller Jacob H. Shuford	Charles W. Styron	3,491	9	431
110	1964	Greensboro	677	John S. Rhodes	T. S. Raiford	Wm. F. Hollister F. G. Patterson	Charles W. Styron	3,473	8	398

†Died during his term of office; succeeded by E. J. Wood, first vice president. ‡Died during term of office (1) Died during term of office; succeeded by I. H. Manning
(2) Died during term of office; succeeded by James F. Robertson, president-elect.

STATUS OF SOCIETY MEMBERSHIP BY COUNTIES FOR YEARS 1932-1964

COUNTY	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
Alamance-Caswell	32	29	32	30	31	30	27	34	35	35	42	41	43	38	43	36	39	40	39	39	54	58	59	62	62	63	65	66	66	67	70	70	72
Alexander 1																																7	6
Alleghany 2																																4	4
Anson	4	4	9	7	8	7	6	11	10	10	9	10	9	9	9	10	10	11	10	10	11	11	10	11	10	10	8	8	10	8	8	8	9
Ashe 3	4			7													15								11		8	8	9	13	8		8
Ashe-Watauga																17	7	17	15	15	15	16	18	22									
Avery 4	5		5	5	5	5	6	4	5	5	6	7	9	8	6	7	7	8	8	8	7	10	10	9	8	9	9	9	11	10	10	13	11
Beaufort	15	12	13	15	10	9	11	12	13	13	14	13	13	12	13	16	19	19	15	15	15	19	16	15	16	17	20	19	18	19	37	20	22
Bertie	7	8	9	11	9	8	8	7	7	7	8	7	8	6	6	8	7	6	5	5	7	7	10	10	10	10	10	10	10	10	8	8	9
Bladen	8	5	6	6	6		7	7	7	7	7	7	7	7	7	7	6	5	6	6	8	10	10	11	11	11	12	11	12	10	10	10	10
Brunswick	2	2	2	3	2																												
Buncombe	105	83	107	115	106	98	103	111	108	90	97	115	128	121	124	145	162	154	139	139	132	154	162	159	174	175	175	170	170	172	175	174	179
Burke	17	17	12	10	13	18	17	18	22	22	21	23	25	8	24	32	36	33	26	27	32	34	38	35	38	35	36	34	34	35	36	36	40
Cabarrus	20	10	14	21	8	11	11	12	15	16	27	28	34	26	29	40	41	40	37	39	44	42	51	47	52	59	59	58	62	60	61	58	59
Caldwell	12	9	12	12	12	13	15	18	17	17	17	20	18	19	16	21	21	20	20	20	25	25	25	23	26	28	27	26	27	29	31	32	34
Camden 5																																	
Carteret	12	12	12	11	12	10	2	3	2	4	6	6	8	4	9	11	13	13	14	14	14	15	16	16	16	17	18	19	20	20	20	20	1
Caswell 6				11																													19
Catawba	16	8	16	16	16	14	19	19	15	13	21	9	24	11	23	25	32	28	32	32	27	37	38	42	46	47	49	51	52	53	58	61	1
Chatham	3	2	3	2	0	1	3	6	4	6	7	7	7	3	3	7	8	6	4	4	4	10	10	10	11	11	12	13	13	15	13	14	64
Cherokee	8	5	8	8	8	7	12	11	11	10	14	12	12	12	13	12	12	11	7	7	9	8	8	9	10	11	11	10	10	11	10	11	12
Chowan-Perquimans	7	6	7	5	4	2	5	5	3	5	7	7	5	5	9	11	11	11	11	11	7	8	10	11	12	12	10	11	10	11	10	11	11
Clay 7																																	10
Cleveland	22	21	20	21	22	21	25	23	27	28	30	30	28	27	28	32	33	28	33	38	36	36	37	42	44	47	45	45	46	43	44	49	48
Columbus	8	8	10	11	10	7	9	16	18	15	17	18	18	32	15	22	20	20	18	18	16	19	19	20	19	23	22	24	23	21	20	22	22
Craven	14	9	5	10	6	6	8	7	7	11	12	14	10	11	14	14	16	17	15	16	13	20	23	26	25	24	27	27	26	28	28	31	31
Cumberland	21	27	27	27	21	24	24	22	22	13	27	25	27	13	25	29	27	28	31	40	42	41	41	46	51	50	56	58	58	59	59	60	58
Currituck 8	1																																2
Dare 5																																	2
Davidson	17	17	20	23	19	24	18	17	29	31	29	29	30	29	29	31	33	35	37	38	33	36	36	37	35	35	40	43	41	40	38	38	38
Davie 9	6	4	2	1	1	1	4																										6
Duplin	7	2	2	9	2	2	4	2	4	10	12	7	11	6	9	13	11	8	8	8	9	10	13	13	16	18	15	15	15	13	13	14	13
Durham-Orange	77	76	76	85	87	81	104	110	119	127	128	135	139	138	133	152	154	151	156	172	152	217	251	261	285	300	313	314	325	344	355	360	378
Edgecombe-Nash	39	25	46	49	32	35	31	39	48	40	37	48	54	52	45	57	55	59	57	57	53	55	64	58	62	67	66	65	61	65	69	66	68
Forsyth	69	70	73	77	77	73	83	82	93	92	115	122	123	129	126	129	135	152	147	148	151	173	176	186	203	213	221	221	220	220	221	234	236
Franklin	7	7	9	8	9	9	6	3		3	4	5	4	2	4	4	5	5	3	3	10	10	8	10	10	10	10	12	10	10	13	11	12
Gaston	37	12	28	30	21	28	38	35	35	41	48	44	43	18	28	42	48	53	48	48	55	59	60	63	70	69	70	70	72	73	73	74	77
Gates	2	2	2	2	2	2	1	2	1	1	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	1
Graham																	2	1				2	2	2									
Granville	12	10	10	11	10	11	13	13	14	14	14	14	14	12	14	13	13	12	2	12	14	13	17	16	19	21	25	26	27	29	28	25	28
Greene	5	5	6	5	6	6	7	6	5	6	7	6	6	6	6	4	6	4	4	4	3	3	3	3	3	3	3			2		2	2
Guilford	118	91	102	99	83	109	101	108	110	115	127	133	135	134	129	151	158	166	166	187	160	196	198	199	215	214	214	220	221	232	240	242	253
Halifax	14	13	15	18	17	25	23	23	24	21	26	26	25	25	22	23	23	22	22	23	25	29	32	31	32	32	33	32	30	29	28	28	25
Harnett	15	16	14	15	10	16	12	12	16	18	18	19	19	19	17	16	19	19	18	18	17	19	13	20	19	19	19	19	21	22	23	24	25
Haywood	13	15	20	19	21	22	21	21	21	19	21	20	20	19	16	21	21	20	17	17	20	21	25	22	26	26	31	33	35	34	33	31	32
Henderson	12	9	17	17	13	14	17	133	10	7	17	17	17	17	20	21	23	23	21	21	19	22	30	31	32	34	34	36	34	34	31	32	32
Hertford	5	6	7	7	4	5	7	7	1	6	6	8	8	2	6	6	6	7	10	10	13	14	14	16	17	14	15	16	16	17	16	16	16
Hoke	12	11	13	14	13	11	10		10	10	11	9	10	10	11	10	9	11	11	11	11	12	15	13	12	14	12	12	12	13	14	13	14
Hyde	1		1	18																									1		1	1	1
Iredell-Alexander	39	29	38	3	39	30	31	25	27	24	23	26	26	10	19	28	32	34	29	30	36	42	50	49	47	48	48	47	47	47	52	47	49
Jackson 10	7	2	4	7	4	6	3	3	1	1	2	3	4	3	6																	11	13
Jackson-Swain																8	9	11	12	12	15	15	14	14	15	16	16	15	16	15	12		
Johnston	26	19	19	21	12	9	27	25	24	18	18	22	23	19	22	26	26	27	30	30	33	35	35	37	39	36	35	36	32	30	32	33	31
Jones	3	3	3	3	3	2	1												1	1	1	1	1	1	1	2	1		1	1	2		2
Lee	13	10	10	10	3	8	10	9	10	11	12	11	12	12	13	13	16	16	15	15	15	16	18	17	16	18	16	17	16	17	19	20	20
Lenoir	19	20	22	20	22	21	22	21	25	24	26	27	27	12	25	29	32	33	27	29	35	37	37	36	41	40	42	47	49	50	49	50	51
Lincoln	12	12	13	11	8	10	11	11	11	14	15	15	14	10	15	14	14	15	14	14	13	14	12	12	10	13	12	12	13	12	12	13	14
Macon-Clay	3	2	5	3	5	4	2	4	1	4	4	4	4	3	7	7	5	6	8	8	7	10	9	9	9	12	11	10	11	11	9	9	10
Madison	4	5	4	4	1		1	1			1	1	1	3	3	8	7	6	6	6	6	7	7	10	6	7	7	7	10	8	6	6	6
Martin 11	4																																
Martin-Washington-Tyrrell		10	10	12	10	12	13	13	11	15	12	14	18	16	17	18	17	17	17	16	21	18	16	15	16	16	17	17	16	15		16	
McDowell	10	11	10	13	10	6	10	12	13	14	13	12	13	13	15	14	14	12	10	10	10	11	13	11	12	12	12	11	11	11	11	11	11
Mecklenburg	117	104	108	116	116	125	119	119	130	138	127	131	142	150	161	175	184	193	198	198	188	229	231	252	270	271	284	289	290	310	314	320	333
Mitchell 12			3	2	3	3	2	3	3	4																							

STATUS OF MEMBERSHIP BY COUNTIES—Continued

COUNTY	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
Mitchell-Avery 13		8																															
Mitchell-Watauga 14	5																																
Mitchell-Yancey											7	5	7	3	5	7	10	13	10	10	10	10	10	9	9	9	9	10	13	11	12	10	11
Montgomery 15	9	7	9	9	8	7	3	6	4	5	6	5	4	2	4	4			11	11	11	10	11	11	10	11	8	7	7	8	8	7	7
Moore	21	18	22	21	19	22	21	20	19	17	22	21	21	20	22	23	26	26	28	28	26	29	33	35	34	32	31	32	32	31	32	37	35
Nash 16																																	
New Hanover	35	25	35	39	34	36	32	39	37	38	43	44	45	40	49	55	62	59	56	56	63	65	68	69	73	76	77	76	80	80	79	81	74
Northampton	5	4	8	4	4	4	9	1	3	7	4	4	4	3	2	3	4	4	4	4	3	5	4	3	3	4	4	4	4	3	3	3	3
Onslow	6	6	6	5	2	5	4	4	3	5	8	8	8	8	8	10	10	12	11	11	1	10	10	10	12	13	12	12	14	15	18	16	13
Orange 17																																	
Pamlico	4	4	4	4	4	4	4	4	4	3	3	3	4	5	4	4	4	4	4	4	4	4	5	5	5	4	4	4	4	3	3	4	2
Pasquotank-Camden-Currituck-Dare		12	14	12	11	9		9	1	10	14	13	12	14	16	17	21	16	20	20	26	27	25	27	28	29	28		26	26	28	28	27	22
Pasquotank-Camden-Dare 8	11										1	1	2	2	1	1				2													4
Pender	1	1	1	1		1	1																										
Perquimans 18																																	
Person	6	7	7	8	7	7	8	8	9	8	8	9	8	6	6	6	6	6	8	7	9	9	9	9	10	10	10	10	11	12	12	11	11
Pitt	20	14	22	26	24	26	30	29	28	25	29	30	31	32	30	31	32	29	31	31	2	34	40	43	46	44	41	43	41	12	14	13	16
Polk	7	7	6	6	4	5	5	5	6	6	6	6	7	7	6	7	5	5	5	4	5	6	6	8	10	11	10	11	11	12	13	13	16
Randolph	14	10	11	13	10	9	11	11	13	12	12	13	14	5	16	20	16	19	20	20	21	26	24	28	28	28	26	28	27	28	31	29	31
Richmond	15	16	15	16	15	17	16	15	16	16	15	17	17	16	18	19	20	15	15	15	18	22	23	21	20	19	20	22	22	25	23	22	21
Robeson	22	23	25	27	28	29	34	33	35	35	35	36	38	38	38	40	47	47	45	45	42	42	44	48	45	43	46	49	48	49	47	50	50
Rockingham	21	22	23	21	18	20	18	22	22	26	24	29	29	25	29	29	30	31	30	30	30	30	32	37	36	37	34	35	39	40	39	40	39
Rowan-Davie	33	24	34	30	27	28	26	24	27	34	33	33	42	42	41	41	49	47	46	44	42	45	48	58	63	60	62	63	63	63	67	53	60
Rutherford	21	19	20	21	23	22	23	23	24	22	22	22	23	22	20	24	25	24	21	21	25	25	24	25	26	27	25	27	25	25	24	25	25
Sampson	14	14	14	14	14	16	16	16	18	18	16	15	16	10	16	15	16	14	15	15	18	17	18	19	20	19	19	17	17	17	19	19	19
Scotland	11	11	11	11	10	11	11	10	10	10	10	9	10	10	9	12	10	13	13	13	14	14	14	14	11	13	13	16	14	17	19	17	17
Stanly 15	13	12	16	17	18	19	18	20	16	17	20	20	17	16	18	21				22	22	24	25	26	29	29	20	27	27	28	27	27	25	27
Stanly-Montgomery																	26	26														3	5
Stokes	6	1	1	1																													
Surry 19	17	12														29	31	32	29	29	23	28	28	28	30	35	38	38	37	39	36	42	38
Surry-Yadkin			25	22	17	15	14	12	18	16	19	23	27																		4	5	5
Swain 10			3		4	5	3	3		2	3	3	2	2	2																		
Transylvania	1	3	2	2	2		2	3	1	7	8	10	9	7	7	6	6	4	7	8	7	10	10	11	9	11	11	12	13	12	13	11	13
Tyrrell 20																																	
Union	9	10	10	11	10	8	11	13	13	14	15	14	14	3	13	14	14	14	15	15	16	17	15	15	16	17	16	15	15	16	19	19	19
Vance	7	8	9	9	8	8	6	10	10	10	12	10	10	8	11	11	12	12	11	11	12	13	14	15	17	16	14	16	15	15	15	17	16
Wake	86	87	89	88	89	95	100	95	94	93	87	98	96	96	92	110	108	114	120	126	114	146	152	147	155	156	158	159	165	172	182	188	189
Warren	6	5	5	6	2	2	2	2	3	2	3	4	5	2	6	6	5	6	6	6	5	7	8	9	9	9	8	7	8	8	7	7	6
Washington-Tyrrell 11	3																								11	10	10	9	9	10	11	11	12
Watauga 21																																	
Watauga-Ashe 22		3	5	6	5	5	6	6	4	5	7	8	5	2	7																		
Wayne	32	22	27	29	27	29	30	31	34	33	35	38	38	37	37	38	38	37	37	37	38	41	37	39	42	43	41	47	50	53	50	55	56
Wilkes 2	10																															18	19
Wilkes-Alleghany		9	13	10	14	13	14	15	13	16	17	17	17	14	16	17	17	18	18	19	17	17	18	21	20	21	22	23	17	18	18		16
Wilson	22	21	25	29	31	25	25	24	25	27	27	31	29	27	30	33	33	35	28	28	30	31	34	37	36	38	39	38	40	42	43	44	
Yadkin 19	4	1																															
Yancey	1		5	4	1		4																										
Totals	1,559	1,369	1,563	1,619	1,462	1,503	1,715	1,605	1,661	1,694	1,837	1,919	1,982	1,811	1,939	2,191	2,298	2,318	2,278	2,343	2,326	2,673	2,801	2,896	3,058	3,127	3,171	3,211	3,247	3,322	3,351	3,429	3,515

(1) See Iredell-Alexander. (2) See Wilkes-Alleghany. (3) See Watauga-Ashe and Ashe-Watauga. (4) See Mitchell-Avery. (5) See Pasquotank-Camden-Dare and Pasquotank-Camden-Currituck Dare. (6) See Alamance-Caswell. (7) See Macon-Clay. (8) See Pasquotank-Camden-Currituck-Dare. (9) See Rowan-Davie. (10) See Jackson-Swain. (11) See Martin-Washington-Tyrrell. (12) See Mitchell-Avery, Mitchell-Watauga, and Mitchell-Yancey. (13) See Avery and Mitchell. (14) See Mitchell, Watauga-Ashe, and Ashe-Watauga. (15) See Stanly-Montgomery, Montgomery, and Stanly. (16) See Edgecombe-Nash. (17) See Durham-Orange. (18) See Chowan-Perquimans. (19) See Surry-Yadkin. (20) See Washington-Tyrrell and Martin-Washington-Tyrrell. (21) See Mitchell-Watauga, Watauga-Ashe, and Ashe-Watauga. (22) See Ashe-Watauga.

ROSTER OF MEMBERS OF NORTH CAROLINA STATE BOARD OF HEALTH FROM ORGANIZATION IN 1877 TO 1964

Name	*Address*	*Appointed by*	*Term*
S. S. Satchwell, M.D., President	Rocky Point	State Society	1877 to 1878
Thomas F. Wood, M.D., Secretary	Wilmington	State Society	1877 to 1878
Joseph Graham, M.D.	Charlotte	State Society	1877 to 1878
Charles Duffy, Jr., M.D.	New Bern	State Society	1877 to 1878
Peter E. Hines, M.D.	Raleigh	State Society	1877 to 1878
George A. Foote, M.D.	Warrenton	State Society	1877 to 1878
S. S. Satchwell, M.D., President	Rocky Point	State Society	1878 to 1884
Thomas F. Wood, M.D., Secretary	Wilmington	State Society	1878 to 1884
Charles J. O'Hagan, M.D., President	Greenville	State Society	1878 to 1882
George A. Foote, M.D.	Warrenton	State Society	1878 to 1882
Marcellus Whitehead, M.D.	Salisbury	State Society	1878 to 1880
R. L. Payne, M.D.	Lexington	State Society	1878 to 1880
H. G. Woodfin, M.D.	Franklin	Gov. Z. B. Vance	1878 to 1880
A. R. Ledeux, Chemist	Chapel Hill	Gov. Z. B. Vance	1878 to 1880
William Cain, Civil Engineer	Charlotte	Gov. Z. B. Vance	1878 to 1880
R. L. Payne, M.D.	Lexington	State Society	1881 to 1887
M. Whitehead, M.D., President	Salisbury	State Society	1881 to 1884
S. H. Lyle, M.D.	Franklin	Gov. T. J. Jarvis	1881 to 1883
William Cain, Civil Engineer	Charlotte	Gov. T. J. Jarvis	1881 to 1883
W. G. Simmons, Chemist	Wake Forest	Gov. T. J. Jarvis	1881 to 1883
J. W. Jones, M.D., President	Wake Forest	State Society	1883 to 1889
John McDonald, M.D.	Washington	State Society	1883 to 1889
S. H. Lyle, M.D.	Franklin	Gov. T. J. Jarvis	1883 to 1885
W. G. Simmons, Chemist	Wake Forest	Gov. T. J. Jarvis	1883 to 1885
Arthur Winslow, Civil Engineer	Raleigh	Gov. T. J. Jarvis	1884 to 1886
R. H. Lewis, M.D.	Raleigh	State Board of Health	1884 to 1886
Thomas F. Wood, M.D., Secretary	Wilmington	State Society	1885 to 1887
William D. Hilliard, M.D.	Asheville	State Society	1885 to 1891
Arthur Winslow, Civil Engineer	Raleigh	Gov. A. M. Scales	1885 to 1891
W. G. Simmons, Chemist	Wake Forest	Gov. A. M. Scales	1885 to 1887
J. H. Tucker, M.D.	Henderson	Gov. A. M. Scales	1885 to 1887
R. H. Lewis, M.D., Secretary	Raleigh	State Society	1887 to 1888
H. T. Bahnson, M.D., President	Winston	State Society	1887 to 1888
Arthur Winslow, Civil Engineer	Raleigh	Gov. A. M. Scales	1887 to 1889
W. G. Simmons, Chemist	Wake Forest	Gov. A. M. Scales	1887 to 1889
J. H. Tucker, M.D.	Henderson	Gov. A. M. Scales	1888 to 1891
J. L. Ludlow, Civil Engineer	Winston	Gov. A. M. Scales	1888 to 1891
J. H. Tucker, M.D.	Henderson	Gov. D. G. Fowle	1888 to 1891
F. P. Venable, Ph.D. Chemist	Chapel Hill	Gov. D. G. Fowle	1889 to 1893
J. L. Ludlow, Civil Engineer	Winston	Gov. D. G. Fowle	1889 to 1892
J. A. Hodges, M.D.	Fayetteville	State Society	1889 to 1893
J. M. Baker, M.D.	Tarboro	State Society	1891 to 1893
J. H. Tucker, M.D.	Henderson	Gov. T. M. Holt	1891 to 1893
F. P. Venable, Ph.D., Chemist	Chapel Hill	Gov. T. M. Holt	1891 to 1892
J. L. Ludlow, Civil Engineer	Winston	Gov. T. M. Holt	1892 to 1897
Thomas F. Wood, M.D., Secretary†	Wilmington	State Society	1891 to 1895
George G. Thomas, M.D., President	Wilmington	State Board of Health	1892 to 1895
S. Westray Battle, M.D.	Asheville	State Society	1893 to 1895
W. H. Harrell, M.D.	Williamston	State Society	1893 to 1895
John Whitehead, M.D.	Salisbury	State Board of Health	1893 to 1895
W. H. G. Lucas	White Hall	Gov. Elias Carr	1893 to 1895
F. P. Venable, Ph.D., Chemist	Chapel Hill	Gov. Elias Carr	1893 to 1895
John C. Chase, Civil Engineer	Wilmington	Gov. Elias Carr	1894 to 1897
R. H. Lewis, M.D., Secretary	Raleigh	Gov. Elias Carr	1895 to 1897
W. P. Beall, M.D.	Greensboro	Gov. Elias Carr	1895 to 1897
W. J. Lumsden, M.D.	Elizabeth City	Gov. Elias Carr	1895 to 1897
John Whitehead, M.D.	Salisbury	State Society	1895 to 1897
W. H. Harrell, M.D.	Williamston	State Society	1895 to 1897
W. P. Beall, M.D.	Greensboro	Gov. Elias Carr	1895 to 1897
R. H. Lewis, M.D., Secretary	Raleigh	Gov. Elias Carr	1897 to 1899
F. P. Venable, Ph.D., Chemist	Chapel Hill	Gov. Elias Carr	1897 to 1899
John C. Chase, Civil Engineer	Wilmington	Gov. Elias Carr	1897 to 1899
Charles J. O'Hagan, M.D.	Greenville	Gov. D. L. Russell	1897 to 1899
John D. Spicer, M.D.	Goldsboro	Gov. D. L. Russell	1897 to 1899
J. L. Nicholson, M.D.	Richlands	Gov. D. L. Russell	1899 to 1901
R. H. Lewis, M.D., Secretary	Raleigh	Gov. D. L. Russell	1899 to 1901
A. W. Shaffer, Civil Engineer	Raleigh	Gov. D. L. Russell	1899 to 1901
Charles J. O'Hagan, M.D.	Greenville	Gov. D. L. Russell	1899 to 1901
J. L. Nicholson, M.D.	Richlands	Gov. D. L. Russell	1899 to 1901
Albert Anderson, M.D.	Wilson	Gov. D. L. Russell	1899 to 1901
George G. Thomas, M.D., President	Wilmington	State Society	1899 to 1901

† Died in 1892, leaving a five-year unexpired term, which was filled by the Board

Name	Address	Appointed by	Term
S. Westray Battle, M.D.	Asheville	State Society	1899 to 1901
H. W. Lewis, M.D.	Jackson	State Society	1899 to 1901
H. H. Dodson, M.D.	Milton	State Society	1901 to 1907
R. H. Lewis, M.D., Secretary	Raleigh	Gov. C. B. Aycock	1901 to 1907
W. P. Ivey, M.D.	Lenoir	Gov. C. B. Aycock	1901 to 1907
George G. Thomas, M.D., President	Wilmington	Gov. C. B. Aycock	1901 to 1905
Francis Duffy, M.D.	New Bern	Gov. C. B. Aycock	1901 to 1905
J. L. Ludlow, Civil Engineer	Winston	Gov. C. B. Aycock	1901 to 1905
S. Westray Battle, M.D.	Asheville	State Society	1901 to 1907
H. W. Lewis, M.D.	Jackson	State Society	1901 to 1907
W. H. Whitehead, M.D.	Rocky Mount	State Society	1901 to 1905
J. L. Nicholson, M.D.	Richlands	State Society	1901 to 1905
J. L. Ludlow, Civil Engineer	Winston	Gov. C. B. Aycock	1903 to 1909
J. Howell Way, M.D.	Waynesville	Gov. R. B. Glenn	1905 to 1911
W. O. Spencer, M.D.	Winston	Gov. R. B. Glenn	1905 to 1911
George G. Thomas, M.D., President	Wilmington	State Society	1905 to 1911
Thomas E. Anderson, M.D.	Statesville	State Society	1907 to 1913
R. H. Lewis, M.D.	Raleigh	Gov. R. B. Glenn	1907 to 1913
E. C. Register, M.D.	Charlotte	Gov. R. B. Glenn	1907 to 1909
David T. Tayloe, M.D.	Washington	State Society	1907 to 1913
James A. Burroughs, M.D.[1]	Asheville	State Society	1909 to 1913
J. E. Ashcraft, M.D.	Monroe	State Board of Health	1909 to 1913
J. L. Ludlow, Civil Engineer	Winston-Salem	Gov. W. W. Kitchin	1911 to 1917
J. Howell Way, M.D., President	Waynesville	Gov. W. W. Kitchin	1911 to 1917
W. O. Spencer, M.D.	Winston-Salem	Gov. W. W. Kitchin	1911 to 1917
Thomas E. Anderson, M.D.	Statesville	State Society	1911 to 1917
Charles O'H. Laughinghouse, M.D.	Greenville	State Society	1913 to 1919
R. H. Lewis, M.D.	Raleigh	Gov. Locke Craig	1913 to 1919
Edw. J. Wood, M.D.	Wilmington	Gov. Locke Craig	1913 to 1915
A. A. Kent, M.D.[2]	Lenoir	State Society	1913 to 1919
Cyrus Thompson, M.D.	Jacksonville	State Society	1913 to 1919
Fletcher R. Harris, M.D.	Henderson	State Board of Health	1915 to 1921
J. L. Ludlow, Civil Engineer	Winston-Salem	Gov. Locke Craig	1917 to 1923
J. Howell Way, M.D., President	Waynesville	Gov. T. W. Bickett	1917 to 1923
E. C. Register, M.D.[1]	Charlotte	Gov. T. W. Bickett	1917 to 1923
Thomas E. Anderson, M.D.	Statesville	State Society	1917 to 1923
Charles O'H. Laughinghouse, M.D.	Greenville	State Society	1919 to 1923
Fletcher R. Harris, M.D.[3]	Henderson	State Society	1919 to 1923
A. J. Crowell, M.D.	Charlotte	Gov. T. W. Bickett	1921 to 1923
Chas. E. Waddell, C. E.[4]	Asheville	Gov. C. Morrison	1919 to 1925
Cyrus Thompson, M.D.	Jacksonville	State Society	1919 to 1925
R. H. Lewis, M.D.	Raleigh	Gov. T. W. Bickett	1923 to 1925
E. J. Tucker, D.D.S.	Roxboro	Gov. T. W. Bickett	1923 to 1929
J. Howell Way, M.D., President	Waynesville	Gov. C. Morrison	1923 to 1929
A. J. Crowell, M.D.	Charlotte	Gov. C. Morrison	1923 to 1927
James P. Stowe, Ph.G.	Charlotte	Gov. C. Morrison	1923 to 1925
D. A. Stanton, M.D.	High Point	State Board of Health	1923 to 1929
Thomas E. Anderson, M.D.	Statesville	State Society	1923 to 1926
Charles O'H. Laughinghouse, M.D.[5]	Greenville	State Society	1925 to 1931
Cyrus Thompson, M.D.[1]	Jacksonville	State Society	1925 to 1931
D. A. Stanton, M.D.	High Point	State Society	1925 to 1931
R. H. Lewis, M.D.[1]	Raleigh	Gov. A. W. McLean	1926 to 1931
Jno. B. Wright, M.D.[6]	Raleigh	Gov. A. W. McLean	1925 to 1931
E. J. Tucker, D.D.S.[6]	Roxboro	Gov. A. W. McLean	1926 to 1927
W. S. Rankin, M.D.[4]	Charlotte	State Board of Health	1927 to 1929
L. E. McDaniel, M.D.	Jackson	State Board of Health	1927 to 1929
Chas. C. Orr, M.D.	Asheville	Gov. A. W. McLean	1929 to 1935
Thomas E. Anderson, M.D.[6]	Statesville	State Society	1929 to 1935
L. E. McDaniel, M.D.[6]	Jackson	State Society	1927 to 1933
James P. Stowe, Ph.G.[6]	Charlotte	Gov. A. W. McLean	1929 to 1935
A. J. Crowell, M.D.[6]	Charlotte	Gov. O. Max Gardner	1930 to 1931
J. M. Parrott, M.D.[6]	Kinston	State Board of Health	1929 to 1935
Chas. C. Orr, M.D.[6]	Asheville	Gov. O. Max Gardner	1931 to 1935
J. M. Parrott, M.D.[5]	Kinston	State Society	1931 to 1935
C. V. Reynolds, M.D.	Asheville	State Society	1931 to 1933
L. B. Evans, M.D.	Windsor	State Society	1931 to 1933
S. D. Craig, M.D.	Winston-Salem	State Society	1931 to 1933
John T. Burrus, M.D.	High Point	Gov. O. Max Gardner	1931 to 1933
J. N. Johnson, D.D.S.	Goldsboro	Gov. O. Max Gardner	1931 to 1933
J. A. Goode, Ph.G.	Asheville	Gov. O. Max Gardner	1931 to 1935
H. L. Large, M.D.	Rocky Mount	Gov. O. Max Gardner	1931 to 1935
H. G. Baity, C.E.	Chapel Hill	Gov. O. Max Gardner	1931 to 1935

1 Died leaving unexpired term.
2 Resigned to become member of General Assembly.
3 Resigned to become Health Officer Vance County.
4 Resigned.
5 Resigned to become Secretary of State Board of Health
6 Term terminated on account of the reorganization of the State Board of Health by General Assembly.

Name	Address	Appointed by	Term
Grady G. Dixon, M.D.[7]	Ayden	Ex. Com. State Society	1931 to 1932
Grady G. Dixon, M.D.[7]	Ayden	State Society	1932 to 1935
S. D. Craig, M.D.	Winston-Salem	State Society	1933 to 1937
W. T. Rainey, M.D.	Fayetteville	State Society	1933 to 1937
J. N. Johnson, D.D.S.	Goldsboro	Gov. J. C. B. Ehringhaus	1933 to 1937
Hubert B. Haywood, M.D.	Raleigh	Gov. J. C. B. Ehringhaus	1933 to 1937
James P. Stowe, Ph.G.	Charlotte	Gov. J. C. B. Ehringhaus	1933 to 1937
Grady G. Dixon, M.D.	Ayden	State Society	1935 to 1939
J. LaBruce Ward, M.D.	Asheville	State Society	1935 to 1939
H. Lee Large, M.D.	Rocky Mount	Gov. J. C. B. Ehringhaus	1935 to 1939
H. G. Baity, C.E.	Chapel Hill	Gov. J. C. B. Ehringhaus	1935 to 1939
J. N. Johnson, D.D.S.	Goldsboro	Gov. Clyde R. Hoey	1937 to 1941
Hubert B. Haywood, M.D.	Raleigh	Gov. Clyde R. Hoey	1937 to 1941
James P. Stowe, Ph.G.	Charlotte	Gov. Clyde R. Hoey	1937 to 1941
S. D. Craig, M.D.	Winston-Salem	State Society	1937 to 1941
W. T. Rainey, M.D.	Fayetteville	State Society	1937 to 1941
Grady G. Dixon, M.D.	Ayden	State Society	1939 to 1943
J. LaBruce Ward, M.D.	Asheville	State Society	1939 to 1943
H. Lee Large, M.D.	Rocky Mount	Gov. Clyde R. Hoey	1939 to 1943
H. G. Baity, Sc.D.	Chapel Hill	Gov. Clyde R. Hoey	1939 to 1943
C. C. Fordham, Jr., Ph.G.[8]	Greensboro	Gov. Clyde R. Hoey	1940 to 1943
S. D. Craig, M.D.	Winston-Salem	State Society	1941 to 1945
W. T. Rainey, M.D.	Fayetteville	State Society	1941 to 1945
Hubert B. Haywood, M.D.	Raleigh	Gov. J. Melville Broughton	1941 to 1945
J. N. Johnson, D.D.S.	Goldsboro	Gov. J. Melville Broughton	1941 to 1945
James O. Nolan, M.D.	Kannapolis	Gov. J. Melville Broughton	1941 to 1945
Grady G. Dixon, M.D.	Ayden	State Society	1943 to 1947
J. LaBruce Ward, M.D.	Asheville	State Society	1943 to 1947
H. Lee Large, M.D.	Rocky Mount	Gov. J. Melville Broughton	1943 to 1947
Larry I. Moore, Jr.	Wilson	Gov. J. Melville Broughton	1943 to 1947
S. D. Craig, M.D., Pres.	Winston-Salem	State Society	1945 to 1949
W. T. Rainey, M.D.	Fayetteville	State Society	1945 to 1949
Hubert B. Haywood, M.D.	Raleigh	Gov. R. Gregg Cherry	1945 to 1949
James O. Nolan, M.D.	Kannapolis	Gov. R. Gregg Cherry	1945 to 1949
Paul Jones, D.D.S.[9]	Farmville	Gov. R. Gregg Cherry	1946 to 1949
Jasper C. Jackson, Ph.G.[10]	Lumberton	Gov. R. Gregg Cherry	1945 to 1947
Grady G. Dixon, M.D., Pres.	Ayden	State Society	1947 to 1951
H. Lee Large, M.D.	Rocky Mount	Gov. R. Gregg Cherry	1947 to 1951
J. LaBruce Ward, M.D.	Asheville	State Society	1947 to 1951
Hubert B. Haywood, M.D.	Raleigh	Gov. W. Kerr Scott	1949 to 1953
Mrs. James B. Hunt	Lucama	Gov. W. Kerr Scott	1949 to 1953
A. C. Current, D.D.S.	Gastonia	Gov. W. Kerr Scott	1949 to 1953
John R. Bender, M.D.	Winston-Salem	State Society	1949 to 1953
Benjamin J. Lawrence, M.D.	Raleigh	State Society	1949 to 1953
G. Grady Dixon, M.D.	Ayden	Medical Society	1951 to 1955
George Curtis Crump, M.D.	Asheville	Medical Society	1951 to 1955
John P. Henderson, Jr., M.D.[11]	Sneads Ferry	Gov. Wm. B. Umstead	1954 to 1955
H. C. Lutz, Phg.	Hickory	Gov. W. Kerr Scott	1951 to 1955
Hubert B. Haywood, M.D.[12]	Raleigh	Gov. Wm. Umstead	1953 to 1957
Mrs. J. E. Latta	Hillsboro	Gov. Wm. Umstead	1953 to 1957
A. C. Current, D.D.S.	Gastonia	Gov. Wm. Umstead	1953 to 1957
John R. Bender, M.D.	Winston-Salem	Medical Society	1953 to 1957
Benjamin J. Lawrence, M.D.	Raleigh	Medical Society	1953 to 1957
G. Grady Dixon, M.D.[15]	Ayden	Medical Society	1955 to 1959
George Curtis Crump, M.D.[12]	Asheville	Medical Society	1955 to 1959
Roger W. Morrison, M.D.[14]	Asheville	Medical Society	1957 to 1957
John P. Henderson, Jr., M.D.	Sneads Ferry	Gov. Luther H. Hodges	1955 to 1959
H. C. Lutz, Phg.	Hickory	Gov. Luther H. Hodges	1955 to 1959
Lenox D. Baker, M.D.[13]	Durham	Gov. Luther H. Hodges	1956 to 1957
Earl W. Brain, M.D.[16]	Raleigh	Medical Society	1958 to 1959
Mrs. J. E. Latta	Hillsboro	Gov. Luther H. Hodges	1957 to 1961
Roger W. Morrison, M.D.	Asheville	Medical Society	**1957 to 1959**
John R. Bender, M. D.	Winston-Salem	Medical Society	1957 to 1961
Z. L. Edwards, D.D.S.	Washington	Gov. Luther H. Hodges	1957 to 1961
Chas. R. Bugg, M.D., Pres.[17]	Raleigh	Medical Society	1957 to 1961
Lenox D. Baker, M.D.	Durham	Gov. Luther H. Hodges	1957 to 1961

7 To fill vacancy caused by resignation of Dr. J. M. Parrott.
8 To fill vacancy caused by the death of James P. Stowe, Ph.G.
9 To fill vacancy caused by resignation of J. N. Johnson, D.D.S.
10 To fill vacancy caused by resignation of Larry I. Moore, Jr.
11 To fill vacancy caused by the death of Dr. H. Lee Large.
12 Resigned
13 To fill vacancy caused by resignation of Dr. Hubert B. Haywood.
14. To fill vacancy caused by resignation of Dr. George Curtis Crump
15 Died leaving unexpired term.
16 To fill vacancy caused by the death of Dr. G. Grady Dixon.
17. Died leaving unexpired term.

Name	Address	Appointed by	Term
Ben W. Dawsey, D.V.M.	Gastonia	Gov. Luther H. Hodges	1959 to 1965
Rogert W. Morrison, M.D.	Asheville	Medical Society	1959 to 1963
Jasper C. Jackson, Phg.	Lumberton	Gov. Luther H. Hodges	1959 to 1963
Oscar S. Goodwin, M.D.	Apex	Medical Society	1959 to 1963
*Chas. R. Bugg, M.D., Pres	Raleigh	Medical Society	1961 to 1965
Lenox D Baker, M.D	Durham	Gov. Terry Sanford	1961 to 1965
D. T. Redfern	Wadesboro	Gov. Terry Sanford	1961 to 1965
Glenn L. Hooper, D.D.S	Dunn	Gov. Terry Sanford	1961 to 1965
John R. Bender, M.D.	Winston-Salem	Medical Society	1961 to 1965
John S. Rhodes, M.D.[18]	Raleigh	Medical Society	1963 to 1965
S. G. Koonce	Chadbourn	Gov. Terry Sanford	1963 to 1967
James S Raper, M.D.	Asheville	Medical Society	1963 to 1967
Ben W. Dawsey, D.V.M.	Gastonia	Gov. Terry Sanford	1963 to 1967

18 Fill vacancy caused by death of Dr. Chas R Bugg

ROSTER OF MEMBERS OF THE VARIOUS BOARDS OF MEDICAL EXAMINERS OF THE STATE OF NORTH CAROLINA

FIRST BOARD

James H. Dickson, Wilmington ---1859-1866
Charles E. Johnson, Raleigh ---1859-1866
Caleb Winslow, Hertford ---1859-1866
Otis F. Manson, Townsville ---1859-1866
William H. McKee, Raleigh ---1859-1866
Christopher Happoldt, Morganton ---1859-1866
J. Graham Tull, New Bern ---1859-1866
Samuel T. Iredell, Secretary ---1859-1866

SECOND BOARD

N. J. Pittman, Tarboro ---1866-1872
E. Burke Haywood, Raleigh ---1866-1872
R. H. Winborne, Edenton ---1866-1872
S. S. Satchwell, Rocky Point ---1866-1872
J. J. Summerell, Salisbury ---1866-1872
R. B. Haywood, Raleigh ---1866-1872
M. Whitehead, Salisbury ---1866-1872
J. F. Shaffner, Salem ---1866-1872
William Little, Secretary ---1866-1872
Thomas F. Wood, Secretary, Wilmington ---1867-1872

THIRD BOARD

Charles J. O'Hagan, Greenville ---1872-1878
W. A. B. Norcom, Edenton ---1872-1878
C. Tate Murphy, Clinton ---1872-1878
George A. Foote, Warrenton ---1872-1878
J. W. Jones, Tarboro ---1872-1878
R. L. Payne, Lexington ---1872-1878
Charles Duffy, Jr., Secretary, New Bern ---1872-1878

FOURTH BOARD

Peter E. Hines, Raleigh ---1878-1884
Thomas D. Haigh, Fayetteville ---1878-1884
George L. Kirby, Goldsboro ---1878-1884
Thomas F. Wood, Wilmington ---1878-1884
Joseph Graham, Charlotte ---1878-1884
Robert I. Hicks, Williamston[1] ---1878-1880
Richard H. Lewis, Raleigh[2] ---1880-1884
Henry T. Bahnson, Secretary, Salem ---1878-1884

FIFTH BOARD

William R. Wood, Scotland Neck ---1884-1890
Augustus W. Knox, Raleigh ---1884-1890
Francis Duffy, New Bern ---1884-1890
Patrick L. Murphy, Morganton ---1884-1890
Willis Alston, Littleton ---1884-1890
J. A. Reagan, Weaverville ---1884-1890
W. J. H. Bellamy, Secretary, Wilmington ---1884-1890

SIXTH AND SEVENTH BOARDS[3]

R. L. Payne, Jr., Lexington ---1890-1892
George W. Purefoy, Asheville ---1890-1892
George G. Thomas, Wilmington ---1890-1894
Robert S. Young, Concord ---1890-1894
William H. Whitehead, Rocky Mount ---1890-1896
George W. Long, Graham ---1890-1896
L. J. Picot, Secretary, Littleton ---1890-1896
Julian M. Baker, Tarboro ---1892-1898
H. B. Weaver, Secretary, Asheville ---1892-1898
J. M. Hays, Greensboro[4] ---1894-1897
Kemp P. Battle, Jr., Raleigh[5] ---1897-1900
Thomas S. Burbank, Wilmington[1] ---1894-1898
Richard H. Whitehead, Chapel Hill[4] ---1896-1898
William H. H. Cobb, Goldsboro[6] ---1898-1900
J. Howell Way, Secretary, Waynesville[7] ---1898-1902
David T. Tayloe, Washington ---1896-1902
Thomas E. Anderson, Sec., Statesville ---1896-1902
Albert Anderson, Wilson[8] ---1896-1902
Edward C. Register, Charlotte[8] ---1898-1902
Thomas S. McMullan, Hertford[3] ---1900-1902
John C. Walton[8] ---1900-1902

EIGHTH BOARD

A. A. Kent, Lenoir ---1902-1908
Charles O'H. Laughinghouse, Greenville ---1902-1908
M. H. Fletcher, Asheville ---1902-1908
James M. Parrott, Kinston ---1902-1908
J. T. J. Battle, Greensboro ---1902-1908
Frank H. Russell, Wilmington ---1902-1908
George W. Pressly, Secretary, Charlotte[1] ---1902-1906
G. T. Sikes, Secretary, Grissom[9] ---1906-1908

NINTH BOARD

Lewis B. McBrayer, Asheville ---1908-1914
John C. Rodman, Washington ---1908-1914
William W. McKenzie, Salisbury ---1908-1914
Henry H. Dodson, Greensboro ---1908-1914
John Bynum, Winston-Salem ---1908-1914
J. L. Nicholson, Richlands ---1908-1914
Benj. K. Hays, Secretary, Oxford ---1908-1914

TENTH BOARD

Isaac M. Taylor, Morganton ---1914-1920
John Q. Myers, Charlotte ---1914-1920
Jacob F. Highsmith, Fayetteville ---1914-1920
Martin L. Stevens, Asheville ---1914-1920
Charles T. Harper, Wilmington[4] ---1914-1915
Edwin G. Moore, Elm City[10] ---1915-1920
John G. Blount, Washington[11] ---1914-1920
Hubert A. Royster, Secretary, Raleigh ---1914-1920

ELEVENTH BOARD

Lester A. Crowell, Lincolnton ---1920-1926
William P. Holt, Duke ---1920-1926
J. Gerald Murphy, Wilmington ---1920-1926
Lucius N. Glenn, Gastonia ---1920-1926
Clarence A. Shore, Raleigh ---1920-1926
William M. Jones, Greensboro ---1920-1926
Kemp P. B. Bonner, Sec., Morehead City ---1920-1926

TWELFTH BOARD

Paul H. Ringer, Asheville ---1926-1932
W. Houston Moore, Wilmington ---1926-1932
T. W. M. Long, Roanoke Rapids ---1926-1932
W. W. Dawson, Grifton[4] ---1926-1930
J. K. Pepper, Winston-Salem ---1926-1932
Foy Roberson, Durham ---1926-1932
John W. McConnell, Secretary, Davidson ---1926-1932
David T. Tayloe, Jr., Washington[12] ---1930-1932

THIRTEENTH BOARD

Ben F. Royal, Morehead City ---------- 1932-1938
Benj. J. Lawrence, Secretary, Raleigh ---------- 1932-1938
F. Webb Griffith, Asheville ---------- 1932-1938
Hamliton W. McKay, Charlotte ---------- 1932-1938
J. W. Vernon, Morganton ---------- 1932-1938
W. H. Smith, Goldsboro ---------- 1932-1938
K. G. Averitt, Cedar Creek[4] ---------- 1932-1936
Roscoe D. McMillan, Red Springs[13] ---------- 1936-1938

FOURTEENTH BOARD

Karl B. Pace, Greenville ---------- 1938-1944
William M. Coppridge, Durham ---------- 1938-1944
Frank A. Sharpe, Greensboro ---------- 1938-1944
Lewis W. Elias, Asheville[4] ---------- 1938-1943
J. Street Brewer, Roseboro ---------- 1938-1944
W. D. James, Secretary, Hamlet ---------- 1938-1944
L. A. Crowell, Jr., Lincolnton ---------- 1938-1944
John LaBruce Ward, Asheville[14] ---------- 1943-1944

FIFTEENTH BOARD

C. W. Armstrong, Salisbury ---------- 1944-1950
Paul G. Parker, Erwin ---------- 1944-1950
M. D. Bonner, Jamestown ---------- 1944-1950
T. Leslie Lee, Kinston ---------- 1944-1950
Roy B. McKnight, Charlotte ---------- 1944-1950
M. A. Pittman, Wilson ---------- 1944-1950
Ivan M. Procter, Secretary, Raleigh ---------- 1944-1950
James B. Bullitt, Chapel Hill[15] ---------- 1949-1950
Paul F. Whitaker, Kinston[16] ---------- 1950

SIXTEENTH BOARD

Amos N. Johnson, Garland ---------- 1950-1956
Heyward C. Thompson, Shelby ---------- 1950-1956
James P. Rousseau, Winston-Salem ---------- 1950-1956
Newsom P. Battle, Rocky Mount ---------- 1950-1956
Clyde R. Hedrick, Lenoir ---------- 1950-1956
L. Randolph Doffermyre, Dunn ---------- 1950-1956
G. Westbrook Murphy, Asheville[17] ---------- 1955
Joseph J. Combs, Secretary, Raleigh ---------- 1950-1956

SEVENTEENTH BOARD

Carl Vann Tyner, M.D., Leaksville ---------- 1956-1962
Joseph John Combs, M.D., Raleigh ---------- 1956-1962
John Bascom Anderson, M. D., Asheville ---------- 1956-1962
Thomas Williams Baker, M.D., Charlotte ---------- 1956-1962
Edwin Albert Rasberry, Jr., M.D., Wilson ---------- 1956-1962
Thomas G. Thurston, M.D., Salisbury ---------- 1956-1962
Luther Randolph Doffermyre, M.D., Dunn ---------- 1956-1962

EIGHTEENTH BOARD

Frank Edmondson, Jr., Asheboro, President ---------- 1962-1964
Ralph G. Templeton, Lenoir ---------- 1962-1964
Joseph John Combs, Secretary, Raleigh ---------- 1962-1966
H. Lee Large, Jr., Charlotte ---------- 1962-1966
James E. Davis, Durham ---------- 1962-1968
W. Boyd Owen, Waynesville ---------- 1962-1968
Clark Rodman, Washington ---------- 1962-1968

1 Resigned before expiration of term.
2 Elected for unexpired term of Dr. Hicks.
3 In 1890 the Medical Society of the State of North Carolina adopted the plan of electing members of the Board in such a manner that the terms would expire at different intervals of two years. This practice was followed for twelve years, or until 1902, when the plan was abandoned; an equivalent of two terms of six years each. It is evident that the Society arranged to abandon the policy as early as 1898, as two members were elected for short terms, and two years later two other members were elected for still shorter terms. It is therefore impossible to separate the sixth and seven Boards, since the membership was overlapping.
4 Died before the expiration of his term
5 Elected to serve unexpired term of Dr. Hays.
6 Elected to serve the unexpired term of Dr. Burbank.
7 Elected to serve the unexpired term of Dr. Whithead.
8 Elected for short term expiring in 1902.
9 Elected to serve the unexpired term of Dr. Pressly.
10 Elected to serve the unexpired term of Dr. Harper.
11 Died a few months before the expiration of his term; such a short time that the vacancy was not filled.
12 Elected to serve unexpired term of Dr. W. W. Dawson.
13 Elected to serve unexpired term of Dr. Averitt.
14 Elected to serve unexpired term of Dr. Elias.
15 Elected to serve unexpired term of Dr. T. Leslie Lee.
16 Elected to serve unexpired term of Dr. Paul G. Parker.
17 Elected to serve unexpired term of Dr. James P. Rousseau.

MEDICAL AWARDS

MOORE COUNTY MEDICAL SOCIETY MEDAL

In 1927 the Moore County Medical Society established a fund, the interest from which is used to pay for a medal to be given for the best paper read at the State Society meeting each year. No one is eligible to receive this medal except Fellows of the Medical Society of the State of North Carolina in good standing; no invited guest is allowed to compete.

Each Section Chairman selects a committee of three to decide on the best paper written in their section. The winning papers are then turned over to the State Committee, who select the one to receive the medal. The following Fellows have been awarded this medal:

1928—Paul Pressly McCain, M.D.---------- Sanatorium
"The Diagnosis and Significance of Juvenile Tuberculosis"
(From Section on Pediatrics)

1929—A. B. Holmes, M.D. ---------- Fairmont
"The Treatment of Uremia"
(From Section on Chemistry—Materia Medica and Therapeutics)

1930—C. T. Smith, M.D., and W. Bernard Kinlaw, M.D.---------- Rocky Mount
"The Clinical Consideration of Anaemia of Pregnancy and of Puerperium"
(From Section on Practice of Medicine)

1931—F. C. Smith, M.D.---------- Charlotte
"Practical Value of Perimetry in Intracranial Conditions; Case Reports" (tumors, vascular disease, toxemia, syphillis and trauma.)
From Section on Eye, Ear, Nose and Throat)

1932—Charles I. Allen, M.D.---------- Wadesboro
"An Improved Splint for Treating Fractures of the Lower Extremity Showing Reduction and Skeletal Distraction Attachments"
(From Section on Surgery)

1933—H. L. Sloan, M.D.---------- Charlotte
"Some General Remarks about Cataract Surgery, With Report of 100 Consecutive Uncomplicated Cataract Operations"
(From Section on Ophthalmology and Otolaryngology)
J. R. Adams, M.D.---------- Charlotte
"Hypo-glycaemia in Children"
(From Section on Pediatrics)

1934—Fred E. Motley, M.D.---------- Charlotte
"Complications of Mastoiditis with Special Reference to Septicemia"
(From Section on Ophtalmology and Otolaryngology)

1935—Arthur H. London, M.D.---------- Durham
"The Composition of an Average Pediatrics Practice"
(From Section on Pediatrics)

1936—V. K. Hart, M.D. ---------- Charlotte
"Etiological and Therapeutic Aspects of Bronchiectasis with Clinical Observations on Bronchial Lavage by the Stitt Method"
(From Section on Ophthalmology and Otolaryngology)

1937—No award made.

1938—O. Hunter Jones, M.D.---------- Charlotte
"Pelvic Architecture and Classification with its Practical Application"
(From Section on Gynecology and Obstetrics)

1939—Donnell B. Cobb, M.D.---------- Goldsboro
"Vaginal Ureterolithotomy"
(From Section on Surgery)

1940—C. R. Monroe, M.D., C. D. Thomas, M.D., and C. L. Gray, M.D. Pinehurst
"Thoracoplasty and Apicolysis"
(From Section on Surgery)

1941—Walter R. Johnson, M.D Asheville
"Is Diverticulitis of the Colon a Surgical Disease?"
(From Section on Practice of Medicine)

1942—E. P. Alyea, M.D. Durham
"Castration for Carcinoma of the Prostate Gland"
(From Section on Surgery)

1943—No award made.

1944—D. F. Milam, M.D. Chapel Hill
"Vitamin C Content of Some North Carolina Cooked Foods"
(From Section on Public Helath and Education)

1945—No Meeting.

1946—E. C. Hamblen, M.D. Durham
"Some Aspects of Sex Endocrinology in General Practice"
(From Section on General Practice of Medicine and Surgery)

1947—W. L. Thomas, M.D. Durham
"Some Psychosomatic Problems in Gynecology"
(From Section on Gynecology and Obstetrics)

1948—Felda Hightower, M.D. Winston-Salem
"The Control of Electrolyte and Water Balance in Surgical Patients"
(From Section on Surgery)

1949—George J. Baylin, M.D. Durham
"The Roentgen Aspect of Non-Opaque Pulmonary Foreign Bodies"
(From Section on Radiology)

1950—Parker R. Beamer, M.D. Winston-Salem
"Studies on Experimental Leptospirosis"
(From Section on Pathology)

1951—John P. U. McLeod, M.D. Marshville
"A Simplified Modification for Staining of the Vaginal Smear for Immediate Appraisal of Endocrine Activity"
(From Section on Gynecology and Obstetrics)

1952—Samuel F. Ravenel, M.D. Greensboro
"Humidification in Pediatrics"
(From Section on Pediatrics)

1953—Harrie R. Chamberlin, M.D. Chapel Hill
"Diagnosis and Management of Poisoning Due to Organic Phosphate Insecticides"
(From Section on Pediatrics)

1954—Paul Kimmelstiel, M.D. Charlotte
Roland T. Pixley, M.D. Charlotte
John Crawford, M.D. Charlotte
"Statistical Review of Twenty-two Thousand Cases Examined by Cervical Smears"
(From Section on Pathology)

1955—H. Hugh Bryan, M.D. Chapel Hill
"Obesity and the Public Health"
(From Section on Public Health)

1956—Wm. M. Peck, M.D. McCain
"The Changing Pattern of Tuberculosis"
(Section PH&E

1957—John R. Ashe, Jr., M.D. Concord
John V. Arey, M.D. Concord
"The Use of Diamox in Obstetrics and Gynecology"
(From Section on Obstetrics and Gynecology)

1958—John O. Lafferty, M.D.
"Peptic Ulcers in Children"
(From Section on Radiology)

1959—Robert E. Coker, Jr., MD. Chapel Hill
"The Medical Student and Specialization"
(From Section on Public Health & Education)

1960—William J. A. DeMaria, M.D. Durham
"Management of Childhood Nephrosis"
(From Section on Pediatrics)

1961—William W. Shingleton, M.D. Durham
"Some Recent Clinical and Experimental Advances Relative to Diseases of the Biliary Tracts and Pancreas."
(From Section on Surgery)

1962—Frank C. Greiss, Jr., M.D. Winston-Salem
"Inevitable, Incomplete and Septic Abortions"
(from Section on Obstetrics & Gynecology)

1963—No Awards

THE GEORGE MARION COOPER AWARD

The Fellows of the Wake County Medical Society present this George Marion Cooper Award established in honor of George Marion Cooper, physician and health benefactor.

This medal is awarded by the Fellows of the Wake County Medical Society as a token of appreciation and esteem in recognition of the eminence of an essay contributing to the knowledge and advancement of the science of medicine in the field of Preventive Medicine, Public Health, or Maternal and Infant Health Care, presented before the Medical Society of the State of North Carolina. The following Fellows have been awarded this medal:

1951—Donald L. Whitener, M.D. Winston-Salem
"The Management of Labor and Delivery in the Interest of the Premature Infant"
(From Section on Gynecology and Obstetrics)

1952—Ronald Stephen, M.D. Senior Author; Duke University Durham
"The Evaluation of Methods of Pain Relief During Labor and Delivery with Reference to Mother and Child."
(From Section on Gynecology and Obstetrics)

1953—Ernest Craige, M.D. Chapel Hill
"The Prevention of Recurrences of Rheumatic Fever"
(From the Section on Practice of Medicine)

1954—Richard L. Pearse, M.D. Durham
Eleanor Easley, M.D. Durham
Kenneth Podger, M.D. Durham
"Obstetric Analgesia and Anesthesia"
(From Section on Obstetrics and Gynecology)

1955—Dirk Verhoeff, M.D. Huntersville
William M. Peck, M.D. McCain
"The Trends in Management of Tuberculosis in Children"
(From Section on Pediatrics)

1956—Benjamin A. Johnson, M.D. Durham
Susan C. Dees, M.D. Durham
"Immunization of Allergic Children with Particular Reference to Eczema Vaccinatum"
(Section on Pediatrics)

1957—Walter A. Sikes, M.D. Raleigh
John D. Patton, M.D. Asheville
Robert L. Craig, M.D. Asheville
Marie Baldwin, M.D. Asheville
Anne Sagberg, M.D. Asheville
R. Charman Carroll, M.D. Asheville
"Trends in the Development of an Open Psychiatric Hospital"
(From Section on Neurology and Psychiatry)

1958—Madison S. Spach, M.D.
Jerome S. Harris, M.D.
"Congential Heart Disease in Infancy"
(From Section on Pediatrics)

1959—Roy T. Parker, M.D. Durham
Harry W. Johnson, M.D. Durham
F. Bayard Carter, M.D. Durham
"Obstetric Shock"
(From Section on General Practice of Medicine)

1960—Courtney, D. Egerton, M.D. Raleigh
Robert J. Ruark, M.D. Raleigh
"Continuous Caudal Analgesia in Private Practice"
(From Section on Obstetrics & Gynecology)

1961—Kenneth D. Hall, M.D. Durham
"POST—ANESTHETIC CARE OF THE GERIATRIC PATIENT"
(From Section on Anesthesiology)

1962—Jesse P. Chapman, Jr., M.D. ---------- Asheville
"Thoracic Trauma and Its Treatment"
(from Section on Orthopaedics & Traumatology)

1963—No Awards.

GASTON COUNTY MEDICAL SOCIETY AWARD

By authority of the House of Delegates an award is established by the Gaston County Medical Society for the best presentation of audio-visual material in scientific treatise and will be awarded to the best presentation annually at the Annual Session of the State Society. Competition will be restricted to audio-visual material as provided by the rules. Program Chairmen of the eleven scientific sections should take note of this in the preparation of the 1956 program and in judging of presentations at the Annual Session in 1956. The following Fellows have been awarded this medal:

1952—Kenneth L. Pickrell, M.D. ---------- Durham
"Tattooing the Cornea"
(From Scientific Exhibits)

1953—Joseph E. Markee, M.D. ---------- Durham
"Autonomic Nervous System"
(Film from Audio-Visual Postgraduate Instructional Program)

1954—William H. Boyce, M.D. ---------- Winston-Salem
Fred K. Garvey, M.D. ---------- Winston-Salem
Charles M. Norfleet, M. D. ---------- Winston-Salem
"Biocolloids of Urine in Health and in Calculous Disease"
(From Scientific Exhibits)

1955—Caleb Young, M.D. ---------- Winston-Salem
"Congenital Dislocation of the Hip"
(A motion picture)
(From Postgraduate Audio-Visual Program)

1956—C. R. Stephen, M.D. ---------- Durham
R. C. Martin, M.D. ---------- Durham
Bourgeois-Gavardin. ---------- Durham
"Prophylaxis of Non-Hemolytic Transfusion Reactions: Value of Pyribenzamine"
(Section on Anesthesia)

1957—J. Leonard Goldner, M.D. ---------- Durham
Mr. Bert Titus ---------- Durham
"The Juvenile Amputee-Upper Extremity"
(From Section on General Practice of Medicine)

1958—T. Franklin Williams, M.D.
J. L. DeWalt, M.D.
R. W. Winter, M.D.
Charles H. Burnett, M.D.
"Newer Diagnostic Criteria In Hyperparathyroidism"
(From 1958 Scientific Exhibits)

1959—Albert G. Smith, M.D. ---------- Durham
"Automation in the Clinical Chemistry Laboratory"
(From Section on Pathology)

1960—Paul W. Sanger, M.D. ---------- Charlotte
"Surgical Management of Deformities of the Anterior Chest"
(From 1960 Scientific Exhibits)

1961—Robert Page Morehead, M.D. ---------- Winston-Salem
"TUMOR FORMATION"
(1961 Scientific Exhibits)

1962—Paul W. Sanger, M.D. ---------- Charlotte
"Closure of Ventricular Septal Effects—Presentation of New Methods"
(1962 Scientific Exhibits)

1963—No Awards

NORTH CAROLINA

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Vol. 26 No. 5

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President Raiford's Farewell Address

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Age 12-13—not too soon to pay attention to her acne

At the first sign of acne...the first comedone or seborrhea... "this is the time to institute preventive measures—the time to try to prevent progression to pustulation and scarring."[1] Regular, frequent washing with pHisoHex, antibacterial detergent, can enhance any acne management program, help to clear acne skin faster and better.

pHisoHex is more than a superior cleanser. It contains 3 per cent hexachlorophene, an optimal amount. This powerful antibacterial agent is deposited on the skin where, as an invisible, tenacious film, it degerms between washings. Among 67 acne patients who used pHisoHex, "...results were eminently satisfactory."[2] When pHisoHex was used as the wash in another series of 42 acne patients, "no patient failed to improve."[3]

Why not recommend three or four pHisoHex washings daily and exclusively to all your acne patients? pHisoHex provides superior cleansing action and is nonalkaline, hypoallergenic and "kind" to skin. And for "...a very effective topical treatment for acne vulgaris"[4] prescribe keratolytic pHisoAc® Cream along with pHisoHex. pHisoAc Cream contains colloidal sulfur 6 per cent, resorcinol 1.5 per cent and hexachlorophene 0.3 per cent. It dries, peels and masks lesions. Of 100 patients treated with pHisoHex and pHisoAc (and a low-fat diet), 79 showed good-to-excellent improvement.[4]

pHisoHex is available in unbreakable plastic squeeze bottles of 5 oz. and 1 pint, in plastic bottles of 1 gallon. pHisoAc is supplied in tubes of 1½ oz. For complete acne therapy, prescribe or recommend the special *Combination Package* containing both pHisoHex and pHisoAc Cream.

References: 1. Handelman, Cathryn C.: Early management of acne, *Pediat. Clin. North America* 8:265, Feb., 1961. **2.** McLean, I. E. D.; Graham, K. T., and East, M. O.: The treatment of acne; a trial of "pHisoHex," *Practitioner* 189: 82, July, 1962. **3.** Hodges, F. T.: Therapeutic applications of an antiseptic detergent, *GP* 14:86, Nov., 1956. **4.** Wexler, Louis: Treatment of acne vulgaris, *Clin. Med.* 70:404, Feb., 1963.

pHisoHex®

antibacterial detergent
containing 3% hexachlorophene

Winthrop Laboratories
New York, N. Y. 10016

Winthrop

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NORTH CAROLINA MEDICAL JOURNAL

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VOLUME 26 MAY, 1965 NUMBER 5

President's Farewell Address

The Three Days Of Medicine

THEODORE S. RAIFORD, M.D.

ASHEVILLE

There are but three days in the life of man with which he need concern himself, yesterday, today and tomorrow. *Yesterday* with its cares, its mistakes, and its pain, is gone. Nothing we can do can rectify the errors made, alleviate the sorrow endured, or diminish the moments of happiness experienced. We can only profit by the experience gained in shaping our actions of the future.

Tomorrow, with its burdens, its promises, its uncertainties, and its complexities, is beyond our immediate control. Tomorrow's sun will rise either in splendor or in clouds, but it will rise and challenge us to meet its vagaries with the confidence born of yesterday's experience.

This leaves one day only, *today*, with which to deal. Anyone can meet the challenge of a single day, drawing upon the experience of yesterday and the hope of tomorrow. It is not the challenge of today that drives men mad, but the remorse of yesterday and the dread of tomorrow. Let us therefore live but one day at a time.

Today I would speak briefly of this philosophy as it applies to the art and practice of medicine.

Medicine and Scientific Achievement

Yesterday the diagnosis and treatment of disease was not always exact or accurate. It encompassed an aura of mysticism, frequently hiding an inner core of ignorance. Cause was rarely known, and treatment all too often palliative rather than curative. Epidemic disease in catastrophic proportions was not uncommon.

Today many of these mysteries have been cleared. Contagious diseases, the killers of the young, have been diminished if not obliterated. New developments in detection and treatment have extended life expectancy. The killers of today are the diseases associated with the aging process.

Tomorrow brings the possibility, even the probability, that these too will be diminished if not eradicated. Medicine may well assume a preventive role. It is indeed a goal to be eagerly sought.

Medicine and Politics

Yesterday political activity gave us little concern. We were content to practice the art of medicine, devoting our knowledge and skills toward improving and maintaining the health of our people. We jealously guarded the doctor-patient relationship, so necessary to successful treatment.

Today we have been forced into the political arena by necessity rather than choice. Third parties, some admittedly necessary, have insinuated themselves into this relationship by virtue of economic and political expediency. This has introduced legislative control in some areas, and when this occurs, political advantage becomes a factor to be reckoned with.

Tomorrow many facets of medicine will be subject to political influence — medical schools, hospitals, even group clinics and private office management. It is therefore essential that, regardless of personal preference, we keep informed of political developments, use our influence when possible, and even engage in political activity if nec-

essary, to preserve a maximum of independence in medical practice.

Medicine and Free Enterprise

Yesterday the practice of medicine was free enterprise at its best. The physician gave of his talents to the best of his ability and the patient compensated in like manner. Governmental influence and control posed but a distant and nebulous threat. Sporadic attempts at interference met with little advocacy, and contrary to the experience in other countries, we felt secure in the belief that it could not happen here.

Today we find evidence of bureaucratic control at every turn. Health care at taxpayers' expense for veterans, for military dependents, for governmental employees, for industrial workers, and now for elder citizens has become a reality. Our efforts to halt this trend have met with minimal success.

Tomorrow the outlook is indeed foreboding. We appear to be heading toward a totally socialistic state in which we will be told whom we may treat, where we may work, and what we may charge. The changing philosophy of the American public—forsaking the principles of a free society upon which this nation was founded, for the free hand-out of the "Great Society"—bids fair to encompass medicine together with the other freedoms in a socialistic regime. Only united resistance and complete unanimity of purpose can stem this tide.

Medicine and Its Image

Yesterday the physician was many things to his patient—friend, comforter, confidante, and healer. The limitations of his professional ability were offset by the tower of strength he provided for the afflicted in times of distress.

Today this image has been diminished. Specific drugs and therapeutic modalities have decreased the need for close association, evaluation, observation, and psychological rapport. We as physicians are not entirely blameless for this change. The vast amount of detail involved in modern medical practice may have led us to an unintentional neglect of these factors. Whatever the cause, the public now regards us as somewhat less than sacrosanct, too often as mercenary technicians practicing an exact science according to exact rules in which judgment and individual experience become of secondary importance. Possibly this is our deficiency, possibly a natural product of the changing times.

Tomorrow we face the image of the artisan or tradesman; a servant of the public, available at the beck and call of any, taken for granted when our efforts are successful but sharply criticized when results are less than perfect. Men of medicine will find that dedication, integrity, and intelligence mean little. The successful physician may well be he who is available and applies standardized therapeutic measures to standardized symptom complexes.

Medicine and Its Changing Face

The face of Medicine has indeed changed and will continue to do so. *Yesterday* Medicine was an alluring profession, a Divine Mistress. It was a stern Mistress demanding sacrifice and dedication of those who would follow Esculapius, but who compensated by providing satisfaction, gratification, and pride of achievement. The art of medicine was unclouded by outside influences, politics, economic interference, or restrictions other than those laid down by Hippocrates, which we have accepted as guidelines of self-discipline.

Tomorrow the entire atmosphere of medical practice may well be changed. The psychological rapport between physician and patient may disappear completely, and we, the physicians, treat *cases*, not *people*. Patients will seek *a* doctor, not *their* doctor, in times of illness and distress. Therapeutic modalities may be regimented, dictated by standardized rules and regulations based more often than not on economic practicality rather than specific indication and individual experience. Freedom of choice for *both* physician and patient will be diminished, possibly eliminated in a socialistic climate. We shall become like the tradesman whose hours and compensation therefor are outlined by a paternalistic government.

The tragedy lies in the fact that the physicians of tomorrow, inculcated in this tradition and knowing little of the Divine Mis-

tress and her ways of yesterday, will accept the new climate and look with tolerance at best on the older physician who dares speak of "the good old days." Dr. Robert Soupault, a French physician who has witnessed the disintegration of medicine in France, has written:

> I foresee the day when patients will go to the local cybernetic robot, push buttons corresponding to the symptoms they think they have, and and receive from the monster's maw a magic formula without useless diagnoses but with adequate treatment. The physician will be as anachronistic as the blacksmith. When that day comes our descendants will be members of a submissive herd, anesthetized, who will not dream of protesting, or comparing their fate to that of animals. Besides, since animals can't push buttons, there will still be veterinarians.

Today we can meet challenges armed with the experience of yesterday and the hope of tomorrow, rather than go mad because of yesterday's mistakes and the dread of tomorrow. We can, and must, resist with every fiber all attempts to diminish the stature of medicine. To have the courage of our convictions is not enough. We must have the courage to *re-examine*, then revise or abandon our convictions according to the dictates of an informed conscience. Above all we must continue to the best of our ability to fight disease, to practice medicine as we know best, and to place foremost in our objectives the health of our citizens, lest the criticisms of our motivation be justified. We must continue to increase our knowledge, our skills, and our experience, for the challenges of tomorrow cannot be met with the skills of yesterday.

Medicine and Its Leadership

Yesterday you entrusted the stewardship of this Society to my hands, an honor few of my colleagues have received. Yesterday was filled with challenges, hard work, and frustrations, but at the same time with interest, stimulation, and gratification. No great changes were made nor was the course of medical events appreciably changed by our efforts. Each challenge has been met as it arose and handled expediently, keeping Medicine's "ship of state" insofar as possible, on an even keel. I may have made some enemies, but I hope these are outnumbered by friends. Your support and confidence have been vital and you have my sincere gratitude.

Today my stewardship is completed and a new and more capable President assumes leadership. I do not leave a large void to be filled, nor would I wish to do so. The successes and achievements of this Society come not from one individual, but from the support, participation, and dedication of every member.

Tomorrow the leadership of your Society will be in the hands of a new steward and his successors. It is my most earnest wish that we unite in giving them the support and confidence you have afforded me and in so doing, keep the office of President inviolate. There will be challenges ahead as great as and greater than those of the past and the present. We have never shirked our responsibility in areas of controversy, nor do we intend to do otherwise. Our efforts and activities will continue to be dedicated primarily to maintaining and improving the health care of those whom we would serve. Finally, the stewards of tomorrow should remember that we are part of a democracy and as such, should maintain the right of individual opinion in medicine as well as the other freedoms. Convictions rightly conceived and justly supported *must* be preserved as a fundamental part of the democracy which we would perpetuate.

> . . . .It is easy to see that disease presents to the human mind a far more complicated concept with which to reckon than does death. This, I suppose, is the reason why insurance against death has easily become a vast and exact business, while insurance against illness, like a creature struggling to emerge from its chrysalis, is caught in a strait jacket of tradition, ignorance, inadaptability, and fatalism.—Alan Gregg in *Challenges to Contemporary Medicine,* Columbia University Press, 1956, p. 82.

Headache, Nausea, ~~Glaucoma~~ and Vomiting Due to Undiagnosed Glaucoma

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Headache is one of the most frequently encountered symptoms that confront the physician. Many physicians who rightly seek to rule out refractive error as one of the causes of headache often fail to consider a much more insidious and dangerous ocular condition—chronic primary or secondary glaucoma.

The importance of glaucoma as a cause of blindness has long been recognized, but the public does not recognize the early signs and symptoms of the disease, and the general physician too often overlooks or misinterprets them until considerable damage has been done to the ocular function.

The purpose of this paper is to call attention to the role of glaucoma in the production of undiagnosed headaches occurring over long periods, with or without nausea and vomiting, especially in the elderly. Five cases were selected from the files of the Charlotte Eye, Ear and Throat Hospital to illustrate this phenomenon. All five had histories and symptoms compatible with the diagnosis of glaucoma, but had been treated for other disorders for varying periods without success.

Signs and Symptoms of Glaucoma

Subjective

Headache may be the only complaint of a patient with early glaucoma. It is usually frontal, dull, and more severe in the morning and sometimes after the ingestion of coffee. It is usually accompanied by a dull pain about the eye and in the orbit, but is seldom related to use of the eye.

Wright[2], in 1962, reported a survey of glaucoma on the basis of headache. Eighty-three consecutive patients who came to the dispensary complaining of headache of various types were referred immediately to the ophthalmology clinic. Ten cases of glaucoma were found. One 36-year-old patient had an intraocular tension of 36. Seven suggestive cases were followed in the clinic. Nine of the 10 patients no longer had headache after treatment for glaucoma. This series confirms the importance of glaucoma as one of the causes of headache.

Vision: Vision is usually diminished in a patient having an increase in intraocular tension sufficient to produce headache, nausea, and vomiting. A physician should learn to distinguish fogging of vision from blurring of vision due to refractive error. Many patients with acute congestive glaucoma see the typical halo around lights, consisting of an outer red band and an inner blue component. The phenomenon is produced by optical reflections through corneal edema. A vision evaluation is easily performed in the physician's office and can be of invaluable aid in determining the presence or absence of ocular disease.

Objective findings

Visual acuity is usually diminished, but a patient may have 20/20 vision and still have a 3-degree field due to chronic simple glaucoma.

The *visual field* is usually diminished, especially during the acute phase of glaucoma. All physicians should be able and willing to perform a qualitative confrontation field test (Fig. 1).

Clinical sgins: The conjunctiva is usually injected, and there is a ciliary flush. The cornea is usually steamy and lacking in normal luster. The affected eye is quite hard to palpation. The pupils are usually unequal and that of the involved eye is frequently dilated. Since the pupil may be irregular, owing to secondary synechiae or rubeosa, any patient who presents this sign should be carefully examined for glaucoma.

The lens may or may not be cloudy. The nauseated patient usually holds his hand

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Fig. 1. Illustration of confrontation field testing. The patient maintains a forward gaze. The examiner moves his forefinger from the temporal field forward until the patient recognizes movement in the peripheral field. Four quadrants are usually tested. This is a simple technique for detecting gross defects in the visual field. It can be refined by asking the patient to count the fingers in the different quadrants of the field.

over the involved eye. Vomiting and secondary dehydration ensue, and the patient may exhibit hyperpyrexia, chills, and temporary leukocytosis.

Tension: On palpation of the globe by the forefinger technique (Fig. 2), the sclera usually feels abnormally firm. The two eyes are easily compared. Every physician should be familiar with this technique. If available, Schiötz tonometry (Fig. 3) or applanation tonometry (Fig. 4) provides a precise measurement of the intraocular tension.

Illustrative Cases

Case 1

A 63-year-old white man experienced a severe dull headache over the left eye on or about November 8, 1962. Within a few days he had morning nausea unaccompanied by vomiting.

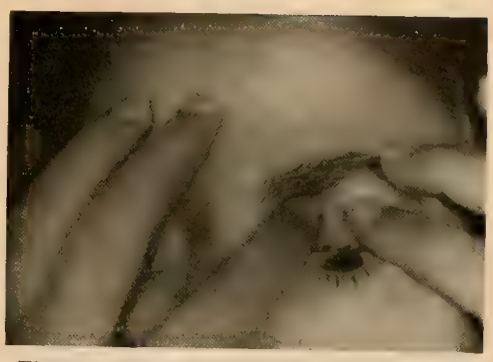


Fig. 2. Tactile tension. Tactile tension is measured by utilizing the forefinger on each hand. The patient is asked to look down. The eye is palpated at the superior sclera, through the lids. Indentation is made first with one forefinger and then the other so that an estimation of the indentation produced by manipulation can be recorded. This is a gross estimate of the actual pressure but is useful in differentiating a hard eye from a soft eye.



Fig. 3. The use of a Schiotz tonometer. The examination is usually preceded by the use of a local anesthetic in the conjunctival cul-de-sac. Ophthaine (Squibb) is quite rapid and effective as a local anesthetic. The test is best done with the patient lying down. A marker on the ceiling may be used as a point for fixation. The lids are pulled apart with the fingers, being careful not to induce external pressure to the globe. The pressure reading is taken directly from the scale and converted, using a 1955 calibration scale, to millimeters of mercury.

Because of a history of poor dental hygiene, he was referred to his dentist, who carried out a complete dental extraction. This measure, however, did not alleviate the patient's headache nor his nausea.

On November 18 he was admitted to a local hospital by his personal physician with a diagnosis of nausea and headache of undetermined origin. Multiple roentgenograms of the gastro-

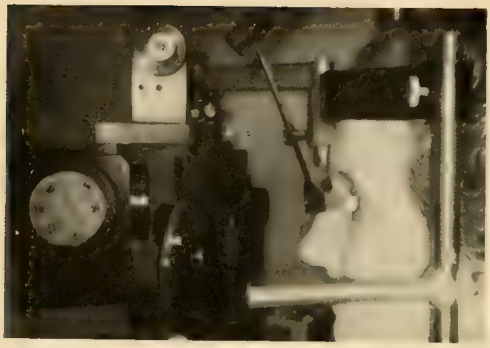


Fig. 4. Illustration of application tonometry. This technique is best performed by an ophthalmologist. It requires special equipment and patient cooperation, but is a very accurate measurement of the intraocular pressure. This test is usually done on routine refractions.

intestinal tract and skull were obtained. The patient continued to be nauseated and began vomiting on the fourteenth hospital day. At this time the left eye became noticeably red, and he was referred for ophthalmologic consultation.

On December 3, 1962, his vision was found to be 20/70 in the right eye with bare light perception in the left. The left eye was red and injected, and there was early iritis rubeosa and a steamy cornea (Fig. 5). The ocular tension measured 43 (Schiotz) on the right and 120 (Schiotz) on the left. Gonioscopy revealed vascular infiltration into the angle, with a "fire brick angle." Ophthalmoscopic examination through a glycerine-cleared cornea revealed an old venous thrombosis on the left.

Administration of Diamox, 500 mg every six hours, was begun immediately, in conjunction with local application of steroids and Epitrate.



Fig. 5. (Case 1) Acute secondary glaucoma due to venous thrombosis. Loss of corneal luster is seen. Multiple new blood vessels are apparent on the surface of the iris. The pupil is semi-dilated and early cataract is present.

Within three hours his nausea and headache completely disappeared, and the next day he was much more comfortable. After consultation with other staff members, the left eye was enucleated on the following day. During his hospital stay a complete ophthalmologic evaluation for glaucoma in his remaining eye was done, and administration of pilocarpine was begun. He was discharged with normal pressure on the right and was asked to continue using pilocarpine. Visual field test showed no scotoma in this eye.

The pathologic diagnosis of the enucleated eye was retinal vein thrombosis with secondary glaucoma and iritis rubeosa.

Case 2

A 70-year-old white woman had had a known cataract in the right eye for seven years. Since vision in the left eye was 20/20, her opthalmologist advised against having the cataract extracted unless the left eye began to fail, and told her to return annually for re-evaluation. She failed to do this.

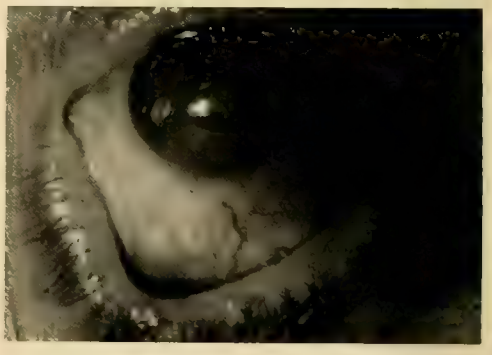


Fig. 6. (Case 2) A hypermature cataract is seen in the pupillary opening. The eye is quite injected and the pupil is nonreactive.

On May 28, 1962, she began to have pain in the right frontal area associated with nausea. She called her personal physician, who prescribed anti-emetics and supportive treatment, therapy with no results. She refused to go to his office until forced to do so by severe pain and nausea and vomiting on May 30. He immediately referred her for ophthalmologic consultation.

When examined at 10 P.M. on May 30, the right eye was found to be considerably injected. (Fig. 6). The cornea was steamy and the anterior chamber was narrow. There were multiple anterior and posterior synechiae, and an "overripe" cataract was bulging into the anterior chamber. The ocular tension was 60 (Schiotz) on the right and 14.6 on the left. She was admitted on an emergency basis with a diagnosis of acute glaucoma secondary to hypermature cataract. Under treatment with Diamox every six hours and pilocar-



Fig. 7 (Case 3) The acutely congested eye can be seen on the left. There is a hypermature cataract with a non-reactive pupil and considerable cilliary injection. The iridectomy which was performed during routine cataract extraction is seen on the right. This eye was normal externally but there was retinal disease limiting vision.

pine combined with local steroids, the nausea and vomiting subsided promptly and the eye cleared sufficiently to warrant removal of the cataract on June 6. At that time an overripe watery cataract was removed uneventfully. Her postoperative course was benign. The ocular tension has remained normal, and there has been no recurrence of nausea and vomiting.

Case 3

A 79-year-old retired farmer had had a cataract removed from his right eye in 1948. The operation was followed by a hemorrhage in the macula. When a cataract developed in his left eye one year later, he hesitated to have it extracted because of the poor result on the right. He had been followed by his local physician since 1952 and was told in 1960 that the cataract had become "ripe," but refused operation.

Three weeks prior to admission the patient began to have severe pain over the left eye, accompanied by aching in the forehead and brow, followed by nausea and vomiting. He had vomited steadily for two weeks and had been treated by his local physician for influenza. He became dehydrated, and the family decided to seek ophthalmologic consultation.

Emergency examination disclosed an acutely injected left eye and a hypermature cataract. The anterior chamber had narrowed and was almost completely occluded. He was admitted on an emergency basis with a diagnosis of hypermature cataract and secondary glaucoma. Treatment with 500 mg of Diamox in conjunction with local administration of pilocarpine resulted in complete resolution of the glaucoma and inflammation. Saline and glucose were given intravenously, and the cataract was extracted, with the patient under local anesthesia, on October 12, 1962. The operation was uneventful and his postoperative course was benign. The glaucoma has not recurred and vision in the affected eye is 20/80, with a slightly restricted visual field.

The final diagnosis was glaucoma secondary to hypermature cataract.

Case 4

A 28-year-old man had noted a slight headache on the morning of July 18, 1962, followed shortly by severe pain in the left eye, associated with nausea and vomiting. He was hospitalized by his personal physician and treated for influenza. The treatment did not relieve the nausea and vomiting, and the eye became more injected. After three days he was referred for ophthalmologic consultation. The past medical history was negative except for mild hypertension. The family history revealed nonspecific ocular disorders in several members of the family. He was admitted to the hospital as an emergency case on July 21, 1962.

On admission the left eye was considerably injected. The lens was completely dislocated into the anterior chamber, and was pressing against the cornea. The right lens was also dislocated, but was posterior to the iris.

The patient presented the typical habitus of the Marfans syndrome. Large doses of Diamox were given orally and intravenously, and a 6% solution of pilocarpine was prescribed. The pressure was gradually reduced, and six hours after admission he was taken to surgery where the dislocated lens was extracted without complication. The postoperative course was uneventful, and there was no recurrence of headache, nausea, and vomiting.

The final diagnosis was glaucoma secondary to dislocation of the lens due to Marfans syndrome.

Case 5

A 69-year-old white woman was first seen in 1951 complaining that her glasses were "uncomfortable." She reported some visual difficulty at the movies, dizziness on going down steps, and excessive watering of the eyes. At this time her vision was recorded as 20/20 in both eyes, and no abnormality other than a shallow anterior chamber was noted. A mydriasis test for glaucoma was not done, nor was a gonioscopic examination.

On March 6, 1955, while in Florida, the patient suffered a severe right frontal headache. She became nauseated and vomited severely. She was admitted to an osteopathic hospital on March 3 and given glucose intravenously for a condition called "biliousness." The nausea and vomiting continued, and she was finally seen by an ophthalmologist on April 4. Retrobulbar injection and management of the acute symptoms were successful.

When she was first seen at the Eye, Ear and Throat Hospital on May 12, 1955, there was no

light perception in the right eye and 20/200 vision in the left. The pressure was measured as 45 on the right and 22 on the left. The anterior chambers were found to be quite shallow, and gonioscopy revealed the typical narrow angles of acute glaucoma.

The right eye finally had to be enucleated because of chronic pain, and pressure. The left eye was well controlled with 6% pilocarpine. The visual field originally was reduced to a central 30 degrees, and there was gradual loss of the field in the remaining eye. Iridenclesis was performed in November of 1955, and extraction of the cataract in February, 1956. The ocular tension has been normal since the operation, and she has retained a central 25-degree visual field.

The pathologic diagnosis of the enucleated eye was chronic narrow angle (congestive) glaucoma.

Discussion

These five cases were selected because they present the typical history and findings of headache, nausea and vomiting due to undiagnosed glaucoma. Many similar cases have been seen. Extensive laboratory studies, x-rays, and minor operations were done in case 1, which was followed for about one month before glaucoma was suspected. Patients have been subjected to arteriograms, skull x-rays, air studies, and other neurosurgical tests to determine the cause of headache before glaucoma was diagnosed.

These cases of glaucoma were selected also because of the variety of precipitating conditions. One patient had a venous thrombosis with secondary vascular infiltrate resulting in glaucoma. Two patients had neglected cataracts which became overmature and damaged the eye. The patient with Marfans syndrome presented a variation of lens-induced glaucoma, with unusual dislocation into the anterior chamber. The fifth case represented an acute attack of typical narrow angle glaucoma.

All of these patients manifested pupillary abnormalities. Pupillary inequality or irregularity cannot be ignored.

Classification of Glaucoma

Glaucoma is classifed as primary or secondary.

I. Primary glaucoma
  A. Adult primary glaucoma
    1. Chronic simple (normal angle width) glaucoma
    2. Adult glaucoma caused by anatomic and developmental anomalies —acute narrow-angle glaucoma (Case 5)
  B. Congenital and juvenile primary glaucoma caused by developmental anomalies
    1. Congenital primary glaucoma
      a. Hydrophthalmia
      b. Glaucoma associated with anridia neurofibromatosis, Sturge-Weber disease, etc.

II. Secondary glaucoma
  A. Secondary glaucoma due to mechanical blockage of the trabecular spaces
    1. Obstruction by iris
      a. Acute secondary glaucoma due to lenticular intumescence (Cases 2 and 3)
      b. Acute secondary glaucoma due to dislocation of the lens into the anterior chamber (Case 4)
      c. Aphakic obstructive glaucoma
      d. Secondary glaucoma following penetration of the cornea
      e. Glaucoma associated with essential progressive atrophy of the iris
      f. Massive hemorrhage into the posterior ocular segment
      g. Glaucoma associated with active or healed iritis or anterior choroiditis with blocked angles
    2. Obstruction of the trabecular spaces by particulate matter
      a. Glaucoma capsulare
      b. Pigmentary glaucoma
      c. Glaucoma due to obstruction by lens particles
      d. Glaucoma due to tumor growth
      e. Glaucoma due to cellular debris associated with iritis
      f. Glaucoma due to massive hemorrhage into the anterior chamber
      g. Epithelial ingrowth into the anterior chamber
  B. Glaucoma due to lack of communication between the anterior and posterior chamber
    1. Seclusion of the pupil
    2. Spherophakia

C. Secondary glaucoma associated with irritation of the ciliary body
   1. Iritis and glaucomatocyclitic crisis
   2. Glaucoma associated with posterior dislocation of the lens so that the latter touches ciliary processes
   3. Spontaneous lens capsule rupture
   4. Ridley lenses

D. Secondary glaucoma due to obstruction of venous drainage
   1. Experimental and clinical glaucoma due to vortex vein or anterior ciliary vein obstruction
   2. Secondary glaucoma in pulsating exophthalmos
   3. Secondary glaucoma due to superior vena cava obstruction

E. Secondary glaucoma due to newly proliferated anastomotic vessels involving Schlemm's canal and rubeosis iridis (diabetic and arteriosclerotic) following occlusion of the central retinal vein

F. Secondary glaucoma resulting from trauma

G. Secondary glaucoma associated with epidemic dropsy

H. Secondary glaucoma associated with choroidal angioma.

I. Mixed cases, one of which is secondary

J. Other secondary glaucomas
   1. Glaucoma associated with pigmentary degeneration of the retina
   2. Glaucoma following long-standing retinal detachment

As can be seen from this classification, increased intraocular tension can be precipitated by various factors. It is felt that most persons afflicted with glaucoma consult their personal physician or optometrist before seeing an ophthalmologist. The concept of glaucoma most of us carry away from medical school is of a dramatic, acute episode marked by a sudden onset of violent pain, vomiting, red eye, and blindness. For this reason acute glaucoma rarely goes undiganosed.

Unfortunately, the majority of patients do not present this picture, especially those having secondary or chronic glaucoma. Since these patients may manifest a low-grade headache with or without nausea and vomiting, glaucoma should be considered in the differential diagnosis of all patients having headache in the frontal area.

Summary

In patients who present frontal headache and nausea and vomiting, with or without an injected eye, glaucoma should be suspected. Five cases illustrating this typical clinical pattern are presented. The many causes or precipitating factors are outlined and discussed.

The importance of obtaining detailed ocular and family histories is stressed. Measurements of visual acuity, confrontation fields, and tactile tension are mandatory in patients with headache of undetermined origin. Pupillary inequality should alert the physician to the possibility of glaucoma, which should be considered in the differential diagnosis of any patient who presents a frontal headache.

Acknowledgement

The authors are grateful to staff members of the Charlotte Eye, Ear and Throat Hospital for their assistance in the preparation of this paper.

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If you seek a lively sense of progress in medicine, let me remind you that pus used to be called "God's salve."—Alan Gregg in *Challenges to Contemporary Medicine*, Columbia University Press, 1956, p. 78.

Fulminating Exacerbation of Ulcerative Colitis Post Partum

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WILSON

The coexistence of ulcerative colitis and pregnancy has long been recognized as a serious problem. The effect of pregnancy on the course of ulcerative colitis is unpredictable, and in some cases where a deleterious effect is apparent, the reasons are unknown. Often the relapse or exacerbation related to pregnancy is of an explosive, fulminating nature[1-3]. The following case report involves a patient with no previous history of ulcerative colitis who suffered a fulminating attack during and immediately following delivery of her first child.

Case Report

The patient was a 23-year-old white, married primigravida—a school teacher and the wife of a dental student. She was admitted in active labor to the Woodard-Herring Hospital in Wilson, at 3:30 A.M. on May 8, 1961, at 38 weeks' gestation. For three or four years the patient had been inclined to have diarrhea during times of stress, but gave no other history of gastrointestinal disease. She became pregnant for the first time in August, 1960, and the estimated date of confinement was May 20, 1961. She had slight vaginal bleeding in the sixteenth week of pregnancy and was placed on a regimen of Enovid, 10 mg daily, for two months. She was also given Mycostatin vaginal tablets for monilial vaginitis in the second and third trimesters. The pregnancy progressed uneventfully otherwise, with a weight gain of 19 pounds, a normal range of blood pressure, and negative urinalyses. Three days before the onset of labor, she had four or five loose bowel movements per day. She began to have contractions at about 11 P.M. on May 7, and was admitted to labor and delivery at 3:30 A.M. on May 8.

The past history revealed a tonsillectomy at age 3 and a submucous resection at age 19, but no other significant illness. The family history was noncontributory except for an older sister who was currently under psychiatric care.

Labor and delivery

On admission the patient was having mild contractions every ten minutes. She was relaxed and in no acute distress. The blood pressure was 120/70 the pulse 88, and the temperature 98.6 F. The head, neck, heart, and lungs were normal. The abdomen was gravid, and the fundus was 34 cm above the symphysis. The fetal heart beat was heard in the right lower quadrant at the rate of 140 per minute. The fetus was vertex in the right occipitotransverse position. A rectal examination revealed a cervix dilated 2 cm; it was soft and partially effaced. The presenting part was at the spines.

Labor progressed normally and an amniotomy was done at 8:30 A.M. The patient received 100 mg of Nembutal, 25 mg of Phenergan, and 100 mg of Demerol intramuscularly during labor. After a first stage of nine hours and a second stage of 47 minutes, delivery was effected at 11:57 A.M. by low forceps, with the patient under saddle block anesthesia (5 mg of Pontocaine in a 10% solution of dextrose). A mid-line episiotomy was performed. The infant was a 6 pound 8 ounce living female in good condition. The placenta was delivered intact. The uterus was manually explored, the cervix was inspected, and both were intact. The estimated blood loss was 100-150 cc.

The patient was given 1 cc of Syntocinon intravenously and 1 cc of ergotrate intramuscularly as oxytocics. The blood pressure ranged between 130/90 and 120/90 during the saddle block anesthesia, and was 140/90 one hour after delivery. A catheterized urine specimen obtained at delivery contained albumin estimated at 4 plus. During delivery the patient had several watery, brown, foul-smelling stools through a relaxed sphincter.

Postpartum course

The patient was transferred to her postpartum bed and given a salft-free diet, forced fluids, and blood pressure determinations every three hours. She continued to have watery stools, but for about three hours after delivery her blood pressure ranged about 130/90. At 4:30 P.M., about five hours *post partum*, she was noted to be cold and clammy. Her pulse rate was 120 and her blood pressure was unobtainable. A sterile vaginal examination was performed immediately. The fundus was found to be firm, and there was no evidence of bleeding or hematoma formation. Blood was drawn for a complete blood count and cross-matching. The hemoglobin was 18.3 gm (119%), and the white blood cell count was 8,150. An infusion of dextrose and saline was started, and after about 500 cc had been given, the blood pressure rose to 100/90. She continued to take

fluids by mouth and was started on a course of Kaopectate and paregoric. She appeared lethargic and continued to be cold and clammy. The abdomen was distended, but was soft and nontender; no bowel sounds were heard. The fundus remained firm.

A medical consultant expressed the opinion that this was a case of acute enteritis or enterocolitis with dehydration and shock. The patient was continued on a regimen of intravenous fluids, oral Kaopectate and paregoric, to which was added Achromycin, 500 mg administered by vein followed by 500 mg by mouth four times a day. The blood pressure continued to range around 110/90 until about 10 P.M., when it again became unobtainable. Solucortef, 100 mg, was given intravenously with fluids, and the pressure again returned to about 110/90 for about one hour, then dropped again. Aramine, 5 mg given intramuscularly every hour, and nasal oxygen were then added to the treatment. At about 2 A.M. the patient vomited about 300 cc of dark fluid, and intermitten suction was applied. She continued to have loose, watery stools, containing mucus but no blood, about every hour.

Because of a poor response to Aramine, at about 4 A.M. on May 9 infusion of Levophed was started, using one ampule per liter of fluid. With this treatment her blood pressure was maintained at 90/60. Intramuscular injections of erythromycin, 100 mg every four hours, were also started. It was felt that the patient was dehydrated and that blood transfusion was not indicated. She was continued on a regimen of dextrose and water and dextrose and saline given intravenously. Her condition did not improve during the night, the blood pressure being maintained at 90/60 only with use of Levophed solution.

Laboratory studies done at 8 A.M. on May 9 were reported as follows: Hemoglobin value 112% (17.3 gm), hematocrit level 55%, white blood cell count 8,150, blood urea nitrogen 26 mg/100 ml, and sodium 130, chlorides 87.6, and potassium 4.3 mEq per liter. A urinalysis revealed a specific gravity of 1.022, albuminuria (4+), and no sugar. Microscopic examination of urine was negative. A stool culture was later reported as showing no growth.

For the first 24 hours after delivery, the patient had received 3,500 cc of dextrose in water, 2000 cc of 5% dextrose in saline, and 500 cc of Dextran. Her urinary output had been 1000 cc; fluid produced by gastric suction and vomitus was estimated to be about 800 cc. Because of the persistence of mild shock with blood pressure in the range of 90/50 despite the administration of Levophed, and because of the progressive deterioration of her condition, the patient was transferred to North Carolina Memorial Hospital by ambulance at about 10:30 A.M. on May 9, with Levophed infusion in progress and a physician in attendance.

On admission at about 12:30 P.M. the blood pressure and pulse were unobtainable and respirations were 34 per minute. Admission laboratory studies were reported as follows: hematocrit level 55%, BUN 37 mg/100 ml, and sodium 134, chlorides 99, potassium 4.1, and carbon dioxide 15.1 mEq/liter. Suction was applied through a Levin tube, the administration of nasal oxygen was resumed, and an intravenous cutdown was performed. Shortly after admission the patient had a voluminous blackish-green liquid stool estimated to be about 1,200 cc. The administration of whole blood was started. Paracentesis was performed, yielding ascitic fluid which had a hematocrit level of 1% and a white blood cell count of 12,000, with 92% polymorphonuclears, 5% lymphocytes, and 3% monocytes.

Operation and recovery

The patient received 1,000 cc of whole blood during the afternoon, and her blood pressure rose to 110/60. At about 6 P.M. she was taken to the operating room for exploratory laparotomy with a preoperative diagnosis of intussusception or mesenteric thrombosis. At operation a considerable amount of serosanguinous brown fluid was found in the abdominal cavity. The entire large bowel was edematous and had necrotic spots. The cecum, ascending colon, and transverse colon were prominently involved. There was no evidence of thrombosis in the veins, although no pulsations were present in the mesenteric vessels. The colon was excised from the ileum to the rectosigmoid, and ileosigmoidostomy was performed.

Immediately before and during the operation, the patient received an additional 2,000 cc of whole blood. Immediately after the operation she was placed on a regimen of nasal oxygen, gastric suction, aqueous penicillin (1,000,000 units every four hours), and Chloromycetin (500 mg every six hours). Fluids were administered for six days postoperatively, and fluid and electrolyte balance was maintained. Because of a low serum protein value (total 4 gm/100 ml, albumin 2.7 gm/100 ml) she was given an additional 1,000 cc of whole blood on the second postoperative day. She began to take oral feedings by the seventh postoperative day and maintained a satisfactory fluid and electrolyte balance on oral intake. Skin clips were removed on the fifth postoperative day, and stay sutures were removed on the twelfth day. She began to have loose stools on seventh day, but the diarrhea was controlled with paregoric and Lomotil. By the thirteenth day she was having several well formed stools every day.

Other postoperative complications were atelectasis, which cleared, and superficial phlebitis in the left greater saphenous vein, which responded

to elevation and wrappings. Otherwise the postoperative course was one of slow but gradual improvement, and the patient was discharged on the twenty-fourth postoperative day on a regimen of Lomotil, Metamucil, and Equanil. Her uterus was well involuted. A consultant in gastroenterology felt that the whole process was one of fulminating ulcerative colitis.

Pathology report

Gross: The specimen consisted of a dilated gangrenous segment of the large bowel. There was a small, normal-appearing appendix at the ileocecal valve and a 5 cm. segment of terminal ileum attached to the cecum. The lumen of the bowel was patent, and there was no evidence of obstruction. A cross section of the major vessels within the mesentery along the entire length of the bowel revealed no evidence of occlusion.

Microscopic: All portions of the colon showed mucosal denudement. The mucosa was composed largely of necrotic debris. The submucosa and muscularis were acutely inflamed in some areas. The ileum showed advanced mucosal degeneration. There was no inflammatory infiltrate or necrosis of the ileal muscularis.

The pattern was that of necrosis of the colon and mucosa of the ileum compatible with necrotizing ileocolitis without evidence of primary vascular disease.

Follow-up

The patient did well for one year following her partial colectomy and ileosigmoidostomy. In May, 1962, she had one episode of rectal bleeding, but sigmoidoscopy, barium enema examination, and roentgenograms of the gastrointestinal tract were negative. She had no further episodes of rectal bleeding until June, 1964, when she again had several bloody stools. At this time she underwent a partial ileocolectomy for two ulcers at the site of previous anastomosis of the ileosigmoidostomy. Her present condition is good.

Discussion

Ulcerative colitis usually affects adults between the ages of 20 and 40, and is more prevalent among females than males. It is rare among Negroes and American Indians, and more prevalent among Jews. The incidence is higher among people with high intelligence quotients[3]. Genetic factors must also be given some importance, since there is a familial occurrence of the disease[6]. Despite all that is known, the pathogenesis remains a mystery. Infection is still considered a possible etiologic factor, and some cases may be due to a specific microorganism. There has been no evidence to support a viral etiology.

Psychologic factors certainly play a role, although the mechanism is nonspecific: it is believed that personality disorders often precede the disease. In one study, 90% of the patients gave a history of psychosomatic or psychiatric illness[3].

The most actively investigated hypothesis at present is that ulcerative colitis represents an autoimmune reaction. Identification of a specific antigen is not complete, but circulating antibodies against extracts of human colon have been found in patients with the disease[3]. Colitis has been produced experimentally in rabbits by reproducing a Shwartzman reaction and other hypersensitivity phenomena[10]. Therefore, experimental evidence and certain clinical features of ulcerative colitis, particularly the sudden, explosive manner in which it may occur, suggest that it may be a hypersensitivity disease.

The chronic nature of ulcerative colitis, with exacerbations and remissions, is well documented. More recently, the explosive nature of fulminant colitis has received more attention[2, 9, 11]. Sometimes called necrotizing ulcerative colitis, this type is characterized by hypotension, tachycardia, and abdominal tenderness and distention. At first the diarrhea may be mild and the stools free of blood, but all signs may worsen rapidly. The proximal segments of the colon become markedly dilated and all layers penetrated by a necrotizing inflammation, causing loss of motility. The mortality in such cases is 20-35%. A brief medical trial of three to ten days is justified, and consists of parenteral replacement of deficits of water, electrolytes, albumin, and blood. Intravenous ACTH is indicated, as well as Neomycin and other antibiotics. When these measures fail to bring improvement, surgery is indicated, and a subtotal colectomy with ileorectal anastomosis is the procedure of choice.

When pregnancy and ulcerative colitis occur simultaneously, the effect each has upon the other must be considered. Krawitt[8], reviewing the literature and adding cases of his own, presented 605 cases of pregnancy complicated by ulcerative colitis. Only 10%

resulted in spontaneous abortions, 2% in premature births, and 1% in cesarean sections. In other series no cases of preeclampsia or eclampsia in association with ulcerative colitis were reported. It appears, therefore, that ulcerative colitis does not have a deleterious effect on pregnancy, and does not affect the incidence of spontaneous abortion, premature delivery, or toxemia.

The effect of pregnancy on the course of ulcerative colitis is less predictable, however, and usually is adverse. Krawitt, in his review, found that more than one third of patients with inactive ulcerative colitis at the onset of pregnancy had a recurrence of the disease. Of those with active disease at the onset of pregnancy, about one half suffered aggravation of symptoms, about one fourth remained active, and about one fourth actually experienced remissions during gestation. In 17% of the total number of pregnancies, ulcerative colitis occurred for the first time during pregnancy or *post partum*. Those patients who have ulcerative colitis for the first time during pregnancy usually have the more severe, fulminating variety, as was demonstrated in the case presented. Abramson[1] reported an 80% mortality in patients having an acute onset of the disease during pregnancy.

The cause of the adverse effect of pregnancy on ulcerative colitis is unknown. Crohn[5], in reviewing 150 cases, found that most of the exacerbations and initial cases of colitis occurred during the first trimester or the first four weeks *post partum*. He postulated a correlation between the aggravation of the disease and the level of estrogen and progesterone in the patient, since the incidence of complications was higher in the first trimester of pregnancy, when the hormonal titer was low, and during the postpartum period, when there was a fall in estrogen and progesterone levels. In the second and third trimesters, when these levels rose, the incidence of complications was low.

Krawitt emphasized the psychogenic factors in the problem of ulcerative colitis and pregnancy. He felt that pregnancy presents a stressful situation and that the patient's attitude toward it largely determines the clinical course of the disease. The possibility of a hypersensitivity phenomenon was suggested in a recent cases report[4] concerning a young woman who required postpartum subtotal colectomy for infarction of a colon severely involved with ulcerative colitis. He hypothesized that a generalized Shwartzman reaction, triggered by repeated absorption of endotoxins from the septic colon, caused intravascular thrombosis and infarction of the colon.

Whatever the cause of the aggravation of ulcerative colitis during pregnancy, management of the patient can be a problem. Therapeutic abortion is rarely indicated, and therapy should be directed toward the disease. Many feel that the patient-physician relationship is the most important element of treatment and should be of prime interest to the obstetrician. Medical treatment consisting of diet, rest, and the use of anticholinergics, antispasmodics, sedatives, and sometimes steroid agents should be given a fair trial.

Whatever the cause of the aggravation surgery may be indicated, particularly in the fulminating variety of colitis with dilation of the colon. Preservation of the rectum is desirable, and subtotal colectomy and ileoproctostomy is the procedure of choice.

Summary

This has been the case report of a young woman who had a severe attack of fulminating ulcerative colitis during the intrapartum and postpartum periods of a normal pregnancy and delivery. The acute onset adds support to the theory that this attack may have been a hypersensitivity reaction within the colon. The patient did not respond to a brief trial of medical treatment, and because of this poor response and her grave condition, subtotal colectomy and ileosigmoidostomy were performed. She did well following the operation.

The etiology of ulcerative colitis and the relationship between this disease and pregnancy are briefly discussed.

Acknowledgment

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Carcinoid Tumors and the Carcinoid Syndrome

A Study of Twenty-two Cases

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Carcinoid tumors (argentaffinomas) are rare tumors of the gastrointestinal tract and bronchi, and are sometimes found in ovarian and testicular teratomas[1]. The tumors are small, usually not encapsulated, and frequently appear yellow on fresh section. Only rarely are there mitoses or polymorphous cells; most of the cells are uniform and are believed to arise from the chromaffin (Kultschitsky, basigranular) cells found at the bases of the crypts of Lieberkuhn. Many of the cells contain granules that stain silver in Fontana-Masson preparations, but this reaction is variable and frequently no silver granules are seen.

The name "argentaffinoma" arose from the ability of most carcinoids to stain silver with the above mentioned preparation. Today the term is loosely used as a synonym for carcinoid. Latham and colleagues have recently proposed substitution of the term "Kultschitsky-cell carcinoma" for "carnoid"[2]. Williams has proposed an embryologic classification of carcinoids based on whether they arise in the structures derived from fore-, mid-, or hindgut[3].

Oberndorfer, in 1907, stated that the tumors were benign and did not metastasize; hence he proposed the name "carcinoid." Today the term is used in the opposite sense to mean "carcinoma-like," implying that often they do metastasize. Ariel[4], in 1939, and Pearson[5], in 1949, emphasized the malignant nature of many nonappendiceal carcinoids. As the cases of appendiceal carcinoids are scrutinized more closely, more of them are being found to be malignant[2, 6, 7].

MacDonald[8] believed that carcinoids metastasize by first invading the underlying muscle coats, then the serosa, the regional nodes via lymph vessels, and finally the blood vessels. The majority of those involved in the carcinoid syndrome arise in the ileum and metastasize to the liver, although in 1958 the first case of a bronchial carcinoid with hepatic metastases associated with the syndrome was described. An ovarian teratoma containing a carcinoid without liver metastases associated with the syndrome was described in 1958[9].

Isler and Hedringer (cited by McDonald[8]), in 1953, reported three cases of ileal carcinoids metastatic to the liver and accompanied by chronic right-sided endocarditis with pulmonary stenosis and triscupid insufficiency. They felt that this constituted a syndrome. Biörck and associates had described a similar case in 1952[10].

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The first complete clinical description of the carcinoid syndrome was published by Thorson and others in 1954[11]. They noted the association of the following clinical features: flushing of the skin, frequent watery stools, unusual type of cyanosis, bronchospastic episodes, edema, and ascites associated with abnormalities of the right side of the heart, notably pulmonic stenosis and triscupid insufficiency. They first suggested that the clinical and pathologic findings might be due to secretion of a humoral substance, possibly serotonin. Espamer, in 1954, believed that serotonin (5-hydroxytryptamine[5-HTA]) was produced by chromaffin cells of the intestinal tract; Lembeck, in 1953, had discovered serotonin in carcinoid tumors. These two men aided Thorson and colleagues in their correlation[8].

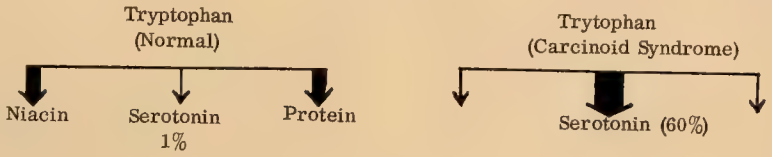


Figure 1

Other findings occasionally associated with the syndrome are peptic ulcers, pellagra-like skin lesions, mental disorders, dizziness, sweating associated with flushes, and arthritis[1]. Between 80 and 90 cases of the carcinoid syndrome have now been reported in the world literature[7].

Role of Serotonin in Production of the Carcinoid Syndrome

Figure 1 is a simplified diagram of tryptophan metabolism in normal subjects and in patients with malignant carcinoid[2].

Ordinarily, urinary level of 5-hydroxyindolacetalhyde (5-HIAA) in normal persons is 2 to 9 mg/day[2], although levels as high as 2,000 mg/day have been reported. Values greater than 10 mg/day are highly suggestive, and levels greater than 25 mg/day are diagnostic of a carcinoid tumor[12]. Ingestion of banana can cause an abnormally high urinary 5-HIAA level, and methocarbomol, mephenesin carbonate[13], and chlorpromazine may give similar color reactions in the screening test for 5-HIAA. A simple screening test using nitrosonaphthol which will detect as little as 40 mg/24 hours has been reported by Sjoerdsma et al[14]. Usually patients with the carcinoid syndrome have levels much higher than 40 mg/24 hours.

Urinary 5-HIAA in the carcinoid syndrome is derived mainly from three sources: (1) a small amount from synthesis by the intestinal mucosa; (2) an unknown amount, probably from 5-HTA liberated from the primary tumor and regional metastases; (3) the largest amount, from 5-HTA formed in and released from metastases drained by caval or, rarely, pulmonary veins[1].

Sjoerdsma[12] felt that elevated levels of urinary 5-HIAA and the presence of serotonin in tumor tissue constitute a more valid basis for diagnosis than various histologic criteria, and that the tumors should be classified biochemically. He held that the term "argentaffinoma" should be abandoned. This seems to be a reasonable suggestion, since there is a wide variance in the ability of carcinoids to stain with Fontana-Masson preparation.

The level of 5-HIAA is a measure of functional tumor mass, and returns to normal after the primary carcinoid and its metastases are completely removed[15].

Physiologic effects

Physiologic effects of serotonin in man are vasomotor phenomena, hyperperistalsis, and bronchoconstriction; and it may act as a pressor, depressor, or biphasic agent in terms of blood pressure response. Infusion of serotonin into the brachial artery will cause a decreased blood flow and increased vascular volume, with flushing and cyanosis of the skin. These findings suggest that serotonin constricts arteries and veins and dilates small vessels. Several investigators have shown that the intestine is quite sensitive to serotonin or its precursor 5-HTP. Increased tone, motility, abdominal cramps, nausea, and vomiting have been demonstrat-

ed. The motility response is thought to be mediated through the cholinergic nerves distal to the ganglions[12].

Others have reported anaphylactic, antidiuretic, hemostatic, and central effects[16].

The signs and symptoms of the carcinoid syndrome are thought to be due to increased circulating free levels of serotonin or its precursor. Organs with high levels of monoamine oxidase, such as the liver and lung, destroy the substance easily. Since liver has ten times the amount of monoamine oxidase per wet gram as compared with the lung, it is felt that much serotonin is inactivated in the liver[1]. Nearly all patients manifesting the carcinoid syndrome have liver metastases. These, in effect, produce serotonin that escapes degradation in the liver and goes via the hepatic veins and caval system to the right side of the heart, the location of almost all cardiac lesions associated with the carcinoid syndrome. The pathogenesis of the valvular and endocardial lesions has been investigated by many. Most authorities believe they are due to the high levels of serotonin passing into the right side of the heart without having first been inactivated.

Serotonin passes from the right side of the heart to the lungs, where much of it is inactivated but some remains free. This remnant then enters the general circulation, producing flushing and other manifestations of the syndrome.

The valves most commonly involved are the tricuspid and pulmonic. They are affected late in the disease and almost equally[1]. The mitral valve is much less commonly involved and the aortic even less so. Examples of leftsided cardiac lesions associated with a patent foramen ovale are described by McKusick[17] and Levine[18]. Leftsided lesions are uncommon when there is not a right-to-left shunt[19, 20].

Thorson[1] reviewed all the published cases of carcinoid tumors with organic heart disease in 1958. The cusps of the valves were described as thickened, shortened, and narrowed, with fibrous tissue involving leaflets, cords, and papillary muscles. Pulmonic stenosis was reported more often than insufficiency, and the incidence of stenosis and insufficiency was about equal when the tricuspid valve was involved. Lesions of the mitral valve resembled those of the tricuspid, and the aortic lesions resembled the pulmonic, but were less marked.

Microscopic examination of the affected valves and mural endocardial lesions usually reveals a fibrous collagenous overgrowth beneath normal endothelium without evidence of elastic fibers. The use of phloxine methylene blue stain can differentiate this type of fibrous tissue. Frequently there are large numbers of tissue mast cells in the affected valvular endocardium and contiguous fibrous tissue[21].

Two investigators[22] in 1957 compared the lesions in carcinoid heart disease, rheumatic heart disease, bacterial and nonbacterial thrombotic endocarditis, lupus erythematosus, congenital pulmonic stenosis and congenital fibroelastosis, and found the microscopic picture in carcinoid heart disease to be a specific lesion.

Millman[23], in 1943, presented a case of tricuspid and pulmonic stenosis associated with a malignant carcinoid of the small intestine. He had found only seven other cases of combined tricuspid and pulmonic stenosis in the world literature. His case seems to fit almost perfectly into the accepted criteria of the carcinoid syndrome.

Experimental Efforts

One group of investigators[24] put mast cell tumors—which secreted heparin, histamine, and serotonin—into rats. A fibrous thickening of value cusps was occasionally noted on both the right and left sides of the heart in both the control and experimental groups. These investigators reasoned that the reresults were negative either because of specie difference or because the experiment did not last long enough.

Another group[25] reported experimental efforts to produce carcinoid disease in animals by feeding them large amounts of biologic precursors of serotonin and administering 5-HTA intravenously. This attempt failed also because the time allowed was insufficient. The group noted that the endocardium of the right ventricle, hepatic veins, and walls of the main pulmonary arteries are spared in carcinoid disease, and wondered if a mechanical phenomenon might be the additional factor causing lesions to appear on

Table 1
Primary Site and Metastases of Carcinoid Tumors

Primary site	Sex Male	Sex Female	Total No.	Percent of total	Benign	Metastases To both liver and other sites	Metastases Liver only	Metastases Sites other than liver	Percent Metastases
Stomach	1	0	1	4.5		0	0	1	100
Duodenum	1	1	2	9.1	1	1			50
Ileum	5	2	7	31.8	1	3		3	86
Cecum	1	0	1	4.5			1		100
Rectum	5	1	6	27.2	4			2	33
Appendix	1	2	3	13.6	3				0
Unknown	0	2	2	9.1		1	1		100
Total	14	8	22	99.8	9	5	2	6	
Associated ulcers	4	0							
Age range	37-85	31-91							
Mean age	61.5	53							
Carcinoid	1	2							
Carcinoid syndrome	1	2							

the pulmonic, tricuspid, and atrial enocardium. Thorson[1] has cited instances of right ventricular endocardial involvement.

The same group postulated a relationship between serotonin and the growth of fibroblasts. They cited the frequent occurrence of fibrosis around the primary tumors. They also cited a report of McDonald which showed that repeated subcutaneous injections of serotonin in rats produced increased numbers of collagen fibers and proliferating fibroblasts at the injection site.

One investigator[26] claims to have produced the carcinoid syndrome by injecting tryptophan- and niacin-deficient guinea pigs with serotonin. He said the animals "showed some of the features of the carcinoid syndrome," but he did not mention which ones. The animals exhibited valvular and endocardial lesions characterized by increased vascularity, monocellular infiltrate with increased numbers of mast cells, and increased subendocardial fibrous connective tissue. None of the serotonin-injected animals on normal diets showed valvular or endocardial lesions. It will be interesting to follow these experiments and results.

Case Reports of Carcinoids at the North Carolina Baptist Hospital

The following series of 20 gastrointestinal carcinoids and two of undertermined primary site comprises cases collected from the charts of patients at North Carolina Baptist Hospital, Winston-Salem, from its beginning (1923) to the present (1964). Many more carcinoid pathologic specimens were received from the outside which lacked sufficient clinical histories to make them useful. In reviewing the cases it was hoped that some cases of the syndrome might be diagnosed in retrospect. This seems probable in one case, No. 7 in Table 4.

The primary site of the tumors ranged from the stomach to the rectum. One (4.5%) was in the stomach, 9 (40.9%) from the small bowel, 1 (4.5%) from the cecum, 6 (27%) from the rectum, and 3 (13.6%) from the appendix. In 2 cases (9.1%) the primary site was unknown, 9 cases (40.9%) were benign, and 13 (59.1%) were malignant (Table 1).

Fourteen of the carcinoids were in males, eight in females. The age range for males was 37 to 85 years, with a mean of 61.5 years. The female age range was 31 to 91 years, with a mean of 53 years. Two female patients definitely had the carcinoid syndrome; one male probably did.

There were no appendiceal metastases. At least one tumor from all the other locations had metastasized: six of seven ileal carcinoids (85%), one of two duodenal carcinoids (50%), one of one gastric (100%), two of six rectal (33%), two of two (100%) of unknown origin.

Of the 13 malignant carcinoids, 7 metastasized either to the liver only or to the liver and other sites. Three of the patients with liver metastases had the carcinoid syndrome.

Diagnosis

The method of diagnosis is interesting. The gastric carcinoid and one duodenal carcinoid were diagnosed at operation for gastric symptoms. One was diagnosed at autopsy. Of the ileal carcinoids, one was found incidentally at operation, one by palpation, one at operation for melena, and four at autopsy. All six of the rectal carcinoids were diagnosed by either rectal, sigmoidoscopic, or proctoscopic examination. The two carcinoids of unknown primary sites were diagnosed by symptoms, signs, and 5-HIAA tests.

Four of 14 males (29%) had peptic ulcers, or 18% of the total group. Four of the 13 patients (31%) with metastases had ulcers. This figure compares with 8 of 21 (38%) in MacDonald's series[8]. In Kinley's series, 4 of 18 patients with extra-appendiceal carcinoid, all males, had peptic ulceration[20]. In the present series, 4 of 19 patients, all males, with extra-appendiceal carcinoids had peptic ulcers. There seems to be a higher incidence of peptic ulceration in patients having the carcinoid syndrome than in the general population.

Table 2 compares the relative incidence of malignancy of carcinoids at various sites in our series with those of other authors.

Carcinoids of the cecum, rectum, and colon were found to have a higher rate of metastasis than those of other sites, with ileal-jejunal carcinoids ranking highest in absolute numbers.

Table 3 summarizes the 22 cases of carcinoids at North Carolina Baptist Hospital.

Case 1 (No. 20 in Table 3)

This patient—gravida 6, para 7—was 34 years of age when she was admitted to another hospital in 1958 because of diarrhea, a deep purple-red flush, and shock. She responded to the administration of electrolytes, cortisone, and thorazine. An x-ray survey was noncontributory. The carcinoid syndrome was suspected when a 24-hour assay of urine for 5-HIAA revealed 41.3 mg/100 ml. A laparotomy was performed and multiple liver nodules (histologically identified as carcinoid tumors) were found. A primary lesion could not be located.

In 1961 the patient was admitted to the North Carolina Baptist Hospital complaining of "swelling, flushing of the face and neck, nausea, vomiting, diarrhea, and stomach soreness for the past six years. Her symptoms had begun in 1955 shortly after the birth of twins, and had recurred for one to three weeks at intervals of six months. In 1958 while pregnant, and for six weeks post partum, she was absolutely free of symptoms. Shortly thereafter the symptoms began to recur more often and were of shorter duration; there was less vomiting and more diarrhea. During each episode she would lose from 20 to 25 pounds, and when admitted was 30 pounds below her normal weight.

Her past medical history and family history were essentially negative. A review of systems revealed that during the episodes she suffered from weakness, dizziness, blurred vision, stomatitis, and hypersalivation. At such times her skin would become dark yellow-brown, returning to normal between spells.

She was undernourished, with marked wasting of the extremities. Her skin was tanned in exposed areas. A grade I systolic murmur was noted along the right sternal border. The liver was felt just above the right iliac crest. There was no tenderness and no fluid line. A urinary test for 5-HIAA was positive. X-ray examination revealed osteoblastic foci in the thoracic spine, a lesion in the left lung field, multiple osteosclerotic bony metastases in the vertebrae, bony pelvis, and proximal femurs, and a mass in the lower midsection of the abdomen. Serial roentgenograms of the upper and lower gastrointestinal tract were negative.

The patient was sent to the National Institutes of Health in 1961, when the episodes of flushing and diarrhea became more frequent. Urine 5-HIAA excretion was 350 mg/day. Administration of phenoxybenzamine (Dibenzyline) caused the level to drop to 200 mg briefly, and chemotherapy with duazomycin A during a period of extreme nausea and poor intake of food resulted in levels of 50 to 100 mg/day. She died at home in 1962, seven years after the onset of symptoms. No autopsy was performed.

Comment

Several interesting features of this case should be mentioned. To our knowledge there is no record of concurrent pregnancy in a woman having the carcinoid syndrome. We have no explanation for the fact that this patient's symptoms completely vanished during pregnancy and did not recur until six weeks following delivery.

The osteoblastic bony metastases are an-

other unusual feature; only 12 recorded cases of carcinoid tumors metastasizing to bone were found. In three out of four reported cases of carcinoid tumors of the gastrointestinal tract and two of bronchial carcinoid in which bone metastases were described, the lesions were characterized as osteoblastic.

Case 2 (Patient No. 21 in Table 3)

A 47-year-old woman, gravida 7, para 7, complained of intermittent diarrhea (15 stools per day) for 13 months.

Her local physician, had found her anemic and harboring *Endamoeba histolytica*. The liver was enlarged. Results of liver function studies were negative except for a bromsulphalein test in which 17% of the dye was retained after 45 minutes. An electrocardiogram indicated right heart strain and low T waves. A chest film was noncontributory. In June, 1960, a grade I murmur along the left sternal border was thought to be evidence of organic tricuspid disease or low septal defect. Administration of digitalis and diuretics resulted in a 12-pound weight loss, and the liver became smaller.

The patient was discharged on a regimen of digitalis and thiazide drugs, but continued to be weak, listless, and slow to respond. Colonic roentgenograms were negative. Associated with the diarrhea and anorexia were abdominal pain and occasional nausea and vomiting. The only cardiorespiratory symptom was a frequent urge to cough. There had been some edema for 10 weeks. For the past year she and her friends had noted spells of deep flushing, sometimes alleviated by placing a cold towel on the face.

Her past medical history revealed "toxic kidneys" associated with joint pain in 1936, but no recurrence.

The patient was a lethargic but cooperative woman, with flushing over the face, neck, and chest. The blood pressure was not obtainable in the left arm; in the right it was 96/70, and the pulse rate was 110-120. Examination of the head, neck, and lungs was unremarkable. A grade IV systolic, diastolic murmur was heard over the lower sternal border. The heart was not enlarged. Later the "murmur of tricuspid insufficiency was louder." The liver was down to within 2 cm. of the iliac crest, and the spleen was down 3 cm. and tender. There was 2-plus pitting edema of the pretibial and ankle areas.

A needle biopsy of the liver was strongly suggestive of metastatic carcinoid. A 24-hour urine assay for 5-HIAA was "strongly positive." A chest film and electrocardiogram were negative.

During her stay in the hospital the patient lost weight and continued to have ankle edema (1-3 plus). Flushing was induced by the ingestion of vinegar, citrus juices, or grape juice. She was sent home on a regimen of Diuril, Lomotil, potassium chloride, aspirin, and digitalis. At home she had much diarrhea and nausea, and was mentally confused. She died in 1961, one and a half years after the onset of symptoms. There was no autopsy.

Comment

This case met all the criteria for the carcinoid syndrome. Flushing could be produced by the ingestion of citrus juices, vinegar, or grape juice. Waldenstrom[27] had a patient who could induce flushing spells by eating Roquefort cheese.

Case 3 (No. 7 in Table 3)

A 67-year-old man initially complained of "stomach trouble." He had "intestinal flu" beginning six months before his first admission, with alternating periods of nausea, vomiting, diarrhea, and obstipation, accompanied by periods of bright red rectal bleeding.

The initial diagnostic impression included a lesion of the descending colon, emphysema, chronic bronchitis (wheezing and cough), prostatism, cirrhosis, and inferior vena cava syndrome. He was given digitalis and vitamins.

When readmitted several months later, further evaluation led to the diagnosis of portal cirrhosis, portal hypertension, probable esophageal varices, and diverticulosis of the colon. He was given a high-protein and high-carbohydrate diet, vitamins, and diuretics.

Three days before his third admission he came to the emergency room because of dyspnea. A grade II systolic murmur was heard for the first time.

By the time of his third admission he had lost 40 pounds and had weakness and nausea. Flushing was not noted, but he was cyanotic. Telangiectasis was observed on the chest and abdomen.

On his last visit an electrocardiogram had been interpreted as indicating questionable pericarditis, myxedema, generalized edema, or myocardial disease. He had dyspnea, epigastric pain, two to four watery stools per day, and abdominal "rushes." Also noted were ascites (4 plus), hepatomegaly with nodules, ankle edema (4 plus), and progressive heart failure. There was no palpable tumor and no arthritis. The urine was not tested for 5-HIAA. Death occurred one month after the symptoms began.

At autopsy, which involved only the abdomen, a metastatic carcinoid tumor was found in the ileal mesentery, with metastases to the liver, pancreas, and aortic lymph nodes. There was moderate fatty metamorphosis of the liver and chronic pyelonephritis. Chronic peritonitis was

thought to be secondary to metastasis. The ileum was ruptured 30 cm proximal to the ileocecal valve. Death was thought to be due to cardiac failure and pulmonary edema.

In view of the history of diarrhea, a 40-pound weight loss, obstipation, nausea, vomiting, borborygmi, developing heart murmur, ascites, peripheral edema, and gradually developing heart failure, together with the possibility of chronic brain syndrome, it seems likely that this patient had the carcinoid syndrome.

Case 4 (No. 22 in Table 3)

A 37-year-old man was admitted first in 1961 with symptoms suggesting ulcer, which was demonstrated by serial roentgenograms of the gastrointestinal tract. In 1962 he was operated on and a 2-cm carcinoid was found in the posterior duodenum, with local metastasis to one lymph node. No pancreatic tumors were found. He underwent a subtotal gastrectomy and an anterocolic gastrojejunostomy at that time. On April 22, 1963, he was readmitted because of epigastric pain and was found to have a 2-liter volume of gastric fluid with total hydrochloric acid of 84 degrees, free acid 76 degrees. His gastric acid secretion was 25 mEq/hour. Roentgenograms of the stomach and duodenum indicated a gastric ulcer, stomal ulcers, and jejunal ulcers. A 24-hour test for 5-HIAA was normal. He underwent a total gastrectomy and resection of the distal 4-5 cm of the esophagus. A Y anastomosis was done between the jejunum and esophagus. No pancreatic tumor was found. His liver was normal.

By September, 1963, he was having some dark stools and constipation. On January 3, 1964, serial roentgenograms of the stomach and duodenum following barium swallow were negative. In February, 1962, he became nauseated, anorexic, and vomited. The liver was thought to be enlarged. Liver scan showed numerous filling defects in the right and left lobes. He had lost 18 pounds during the previous six months, associated with upper abdominal pain and light colored, foul-smelling, floating stools. The liver was down 5 finger-breadths, and was hard and nodular. A rectal shelf was palpated; a biopsy from this area was interpreted as metastatic carcinoid. Two biopsies of the liver were negative. Stool fat was found to be 19.5 gm (normal, less than 5 gm). Carotene was markedly decreased—to 35 gamm per cent. Twenty-four-hour excretion of 5-HIAA was normal (2.61 mg).

Comment

This patient represents a case of the Zollinger-Ellison syndrome associated with metastatic carcinoid and later with steatorrhea, in the absence of a palpable pancreatic tumor. He has none of the symptoms of the carcinoid syndrome. He has ulcers, however, which are known to be more common in patients with carcinoids than in the general population.

In 1956 Waldenstrom and associates[27] presented a patient who had markedly increased levels of histamine, 5-HTA and 5-HIAA, and who had probably had a carcinoid. She had been achlorhydric for 24 years, was subject to spells of flushing, and had osteoblastic metastases. Since ~~serotonin~~ histamine is such a potent stimulus for the release of gastric acid, I wonder it is possible that the patient reported here has a carcinoid which in some way liberates histamine.

A brief survey of the literature failed to disclose any cases of the Zollinger-Ellison syndrome in association with carcinoids. Only five cases of steatorrhea associated with the Zollinger-Ellison syndrome have been reported. Among the reports of multiple endocrine adenomas in association with this syndrome, a recent case included parathyroid adenomas, together with a non-beta-cell islet adenoma[29]. A biopsy of the rectal metastasis and an assay for gastrin would be interesting in the present case.

Summary of N.C.B.H. Cases

Twenty-two cases of carcinoid tumors are reviewed. In 20 cases the primary lesion was located in the gastrointestinal tract; in 2 the primary site was unknown. Thirteen lesions were malignant. Fourteen of the patients were male and eight were female. Two certain cases and one probable case of the carcinoid syndrome were included. The certain cases were diagnosed ante mortem clinically, chemically, and histologically; the other was diagnosed in retrospect post mortem.

Discussion

The incidence of carcinoid tumors is about equally divided between the sexes. These lesions comprise about 1% of all gastrointestinal neoplasms and 8.3% of neoplastic growths in the small bowel. Eighty-five to 96% of carcinoids are found in the ileocecal region, corresponding to the distribution of chromaffin cells. Appendiceal carcinoids comprise about 60% of the total, followed by carcinoids of the ileum. The average age of patients with small intestinal carcinoids

Table 2
Malignancy of Carcinoids

	N.C.B.H.	MacDonald (8)	Anderson et al Kanor et al (6)		Wilson (7)	Kinley (30)	Total No.	Total %
Stomach	1 of 1 100%	8 of 14 57%	1 of 2 50%	4 of 29 13.7%	1 of 1 100%	No tumors	15 of 47	32
Duodenal	1 of 2 50%	1 of 8 12.5%	4 of 6 66.6%	4 of 21 19%	No tumors	4 of 24 16.6%	10 of 37	24
Ileo-jejunal	6 of 7 86%	23 of 74 ileal	2 of 12 16.6%	150 of 438 34.2%	4 of 24 16.6%	7 of 9 77.7%	169 of 490	34
Cecum	1 of 1 100%	?	4 of 4 100%	24 of 34 79.1%	?	?	32 of 39	82
Rectum	2 of 6 33%	?	5 of 12 41.6%	18 of 130 13.8%	2 of 2 50%	0 of 4	33 of 67	49
Appendix*	0 of 3 0	?	1 of 4 25%	29 of 825 3.5%	5 of 36 14%	0 of 34	35 of 902	4
Colon	No tumors	?	2 of 2 100%	3 of 7 42.8%	1 of 4 25%	0 of 4 0	6 of 13	46

*Latham in 1961 found 1,000 cases of carcinoid in the literature with 30 metastases or 3% incidence (2).

is about 57 years, as contrasted with 25 years for those with appendiceal carcinoids[4].

Seventy five per cent of appendiceal carcinoids occur at the distal end of the appendix; according to some authors, between 65% and 84% occur in women. Some authorities attribute the low incidence of malignancy to the fact that many appendices are removed because of acute appendicitis at an early stage of tumor growth[6].

Ileal carcinoids can often be diagnosed by the roentgenographic sign of distal small bowel kinking. The presenting symptoms are usually those of intestinal obstruction; signs of intestinal bleeding or rarely of perforation may appear[30].

Rectal carcinoids frequently bleed and are usually diagnosed by this sign or on routine examination. Colonic carcinoids bleed occasionally. Cecal carcinoids usually are not diagnosed until they have metastasized. (see Table 2).

Medical measures have largely failed to relieve the carcinoid syndrome. Except for chloropromazine, the serotonin antagonists have been ineffectual[30]; however, Dibenzyline brought some relief in Case 3. A high-protein diet and standard treatment of heart failure are used. Opiates are indicated for pain.

Surgical procedures suggested for the treatment of carcinoids in various sites are outlined briefly as follows:

1. *Small bowel*: Adequate enterectomy of the involved small bowel and mesentery (fairly wide segmental resection).
2. *Distal appendix*: Right hemicolectomy if microscopic examination shows tumor invasion of the lymph vessles; otherwise appendectomy and resection of the mesoappendix.
3. *Base of appendix*: Hemicolectomy.
4. *Colon*: Standard operations for cancer[30]
5. *Rectum*: There is a direct relationship between size of the tumor and malignancy. Abdominal excision is indicated for lesions greater than 2.5 cm with evidence of infiltration and ulceration; local excision, for those measuring less than 2 cm and not showing infiltration and ulceration.

Summary

The gross and microscopic characteristics of carcinoid tumors are discussed, together with the history, nomenclature, experimental data, and characteristic lesions of the carcinoid syndrome.

The clinical histories of 22 cases of carcinoid encountered at North Carolina Baptist Hospital are summarized, as well as a number of other reported series.

The incidence, diagnosis, and treatment of carcinoids have been touched on briefly.

Four new cases are reported, including

Table 3

Clinical Summaries of Twenty-two Cases of Carcinoids from North Carolina Baptist Hospital Files

No.	(Yrs.) Age	Sex	Origin	Signs, Symptoms	Diagnosed	Syndrome	Operations	Follow-up	Metstases, Remarks, Results	Alive, Dead, Autopsy	Other Malignancies	Diagnostic x-ray	Pathology
1	66	F	Ileocecal valve	None	At cholecystectomy	No	Resection of terminal ileum, ascending colon, (R) transverse colon, ileotransverse colostomy	Alive 3 years later; no symptoms	Metastases; 2 of 17 local mesenteric nodes	?	None		Fungating mass through cecum
2.	85	M	Terminal appendix	None	Autopsy	No	—	—	Died of congestive heart failure, pneumonia	Autopsy	Well differentiated entiated carcinoma of prostate	—	Carcinoid of terminal appendix
3.	41	M	Rectum	pain on defecation, melena, LLQ* pain, 10 lb. wt. loss	Proctoscopic	No	1-cm polyp removed per rectum	—	?	?	None	—	Carcinoid of rectum
4.	65	F	Terminal ileum	wt. loss, nausea, vomiting, abdominal pain.	Palpation of abdomen	No	Resection of 60-cm ileum with primary reanastomosis	Alive 3 yrs. later	Multiple nodules in liver, mesentery of ileum	?	None	Neg. chest	Carcinoid of ileum involving m. mucosa, regional nodes, liver
5.	77	M	Ileum	Some dyspsnea, liver down 4 cm, grade II sys-	Autopsy	No	—	—	Died of pulmonary embolism 7 days post TUR	No metastasis found at autopsy	—	—	Small ileal carcinoid involving submucosa, muscularis


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			Cecum	None	Autopsy	No	—	—	Died of mycoardial infarct. Had liver metastases	No heart lesions; granulomatous pneumonitis of undetermined cause	No	—	Carcinoid cecum with liver metastases
7.	67	M	Small bowel probably ileum	Nausea vomiting, diarrhea, melena, borborygmi, 40 lb. wt. loss	Autopsy	Possible	—	—	Liver, pancreas, mesentery ileum aortic nodes	Death due to heart failure & pulmonary edema (Autopsy only on abdomen)	No	Neg	Small intest. carcinoid probably ileal
8.	55	M	Rectum	Stomach trouble, dropsy, hypertension, diarrhea	Sigmoidoscopy	No (5-hr 5-HIAA neg)	Rectal biopsy	—	—	Autopsy: amyloidosis, kidney disease, congestive heart failure, pneumonia	No	—	Carcinoid rectum
9.	47	M	Lesser curvature of stomach	Gas, abdominal pressure	Laparotomy	No (5-HIAA neg)	Total gastrectomy, jejunoesophgoscopy, and enterostomy	Died 2 years later	Local lymph notes	—	No	Partically healed ucler; colon neg	Malignant carcinoid of stomach and esophagus
10.	50	M	Rectal polyp	—	Rectal	No	Proctoscopic polypectomy	—	None	Alive without symptoms	No	None	Rectal carcinoid

*Left lower quadrant of abdomen.

Table 3 cont'd.

No.	Age (Yrs.)	Sex	Origin	Signs, Symptoms	Diagnosed	Syndrome	Operations	Follow-up	Metastases Remarks Results	Alive, Dead, Autopsy	Other Malignancies	Diagnostic x-ray	Pathology
11.	74	M	Ileocecum	Ulcer symptoms, some constipation	Incidental autopsy finding	No	—	—	One mesenteric node	Death due to hepatic coma from metastatic gastic carcinoma	Poorly differentiated gastric carcinoma	No evidence of carcinoid	Ileocecal carcinoid
12.	41	F	Appendix	None	At cholecystectomy	No	Appendectomy (elective)	Developed elevated BP 1 yr. post op; neg 5-HIAA GI series	—	?	No	Neg GI series	Carcinoid appendix
13.	74	M	Anterior rectal wall	Constipation 2 yrs. edema penis, scrotum, (R) lower extr. 16 mos.	Rectal examination	No	Inoperable	—	Pelvic walls, post abdominal walls, retroperitoneally ? lymph channel	—	No	—	Probable malignant carcinoid of rectum
14.	61	M	Terminal ileum	Bloody stools, ulcer symptoms, osteoarthritis	Surgery	No	Resection several ileal loops with reanastomosis	Doing well 1 yr. later except grade II systolic mumur	Local mesentery	—	Basal-cell carcinoma of skin (neck)	—	Ileal carcinoids
15.	71	M	Rectum	None	Incidental finding at hemorrhoidectomy	No	Excision via sigmoidoscope	—	—	—	—	—	Rectal carcinoid

			rectal wall	black stools, hematemesis	oscopy		tion of lesion, end to end anastomosis	stricture, cont'd melena, GI bleeding 3 yrs later	nodes				with regional node metastasis (It was not the bleeding site.)
17.	32	F	Distal appendix	Typical appendix Sx	Appendectomy	No	Appendectomy	None	None	—	No	No	Appendiceal carcinoid
18.	79	M	lower ileum	Internal obstruction due either to tumor or regional enteritis; ulcer	Autopsy	No	None for carcinoid	None	Small bowels, hepatic, mesentery	Autopsy	No	Small bowel obstruction, probably secondary to regional enteritis	Ileal carcinoid
19.	91	F	duodenum	None	Autopsy	No	—	—	None	Autopsy	No	——	Duodenal carcinoid
20.	31	F	?	Shock diarrhea, flushing	5-HIAA greater than 350 mg	Yes	Laparotomy (primary tumor not located); biopsy of liver	Died 8 yrs later	Liver, vertebrae, pelvis, proximal femur, lung	Dead. No autopsy	No	Neg efforts to locate primary tumor	Carcinoid (from liver biopsy)
21.	43	F	?	Diarrhea 13 mos. heart failure	Strongly + 5-HIAA	Yes	Needle biopsy of liver	Died one and a half years later	Liver	Dead; no autopsy	No	No cardiac enlargement	Strongly suggests metastatic carcinoid
22.	37	M	Duodenum	No signs of carcinoid Z-E* syndrome steatorrhea	Neg 5-HIAA x 2 Laparotory Rectal biopsy	No	Excision of tumor, total gastrectomy	18 lb wt loss last 6 mos. Metastasis carcinoid to rectum	Liver metastases by scan and palpation; perirectal metastasis with one local node	Alive	No	? Perirectal infiltration	Class II argentaffinoma

*Zollinger-Ellison syndrome.

one probable and two certain cases of the carcinoid syndrome and one case representing the rare combination of metastatic carcinoid tumor, the Zollinger-Ellison syndrome, and subsequent steatorrhea.

Acknowledgement

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Our slowness in using medical science as it could be used is due in part to thinking that chance decides whether we shall be well or sick. It seems also to be due to the fact that medical services possess no appropriate and fully adequate means of informing and educating the public as to the present potentialities of medical care, both preventive and curative. Perhaps, too, the medical profession suffers somewhat from its unceasing necessity to compromise with the patient's ideas of what he wants, what he can do, and what he can pay for. But it is of immense significance that in increasing measure what is good for the few is seen to be good for the many. The health professions must get themselves asked to do what they already know can be done.—Alan Gregg in *Challenge to Contemporary Medicine*, Columbia University Press, 1956, p. 47, 48.

Obstructive Dyspnea: ~~An Unusual Case~~ Rheumatoid Arthritic Involvement of Craniomandibular Structures the Underlying Disease

ODELL C. KIMBRELL, JR., M.D.
RALEIGH

Anatomically the respiratory apparatus is composed of the chest wall, diaphragm, lungs, and stimulating nervous tissue (aortic body, carotoid body, and respiratory center of the brain). In a functional sense, the lung can be divided into the ventilatory system, consisting of the air passages from the nose to the alveolar spaces; the diffusion system, encompassing the alveolocapillary membrane; and the perfusion component, relating to the arterio-capillary-venous complex[1-2].

Interference in any way with the routine function of either one of the pulmonary systems will result in difficult or labored breathing. This type of respiratory distress is referred to as dyspnea.

The object of this paper is to call attention to dyspnea brought about by an unusual form of obstruction of the upper respiratory passage.

Case Report

A 51-year-old white woman has had rheumatoid arthritis for 30 years. At onset the symptoms were intermittent and involved only the joints of the feet and ankles. In time the disease gradually extended to all the peripheral joints and slowly increased to the point of severe deformity of the fingers and toes, and ankylosis of other joints. At one time or another all the usual antirheumatoid measures were tried. Steroids were discontinued in 1961 when a peptic ulcer was identified by radiography.

In September, 1964, the patient was admitted to the North Carolina Memorial Hospital, at Chapel Hill, where successful plastic surgery was performed on the toes in an effort to improve her walking. During the latter months of 1964 she began to notice gradual retraction of the mandible, with resultant loss of ability to completely close her mouth.

Shortly before October, 1964, she began to have episodes of labored breathing while resting in bed. These could be relieved by moving about. A few hours before her admission, early on the morning of October 2, 1964, to the Wake County Memorial Hospital in Raleigh, she was discovered short of breath and confused, and was having some difficulty in expressing herself. She had apparently fallen while attempting to get out of bed.

On admission several interesting points were readily observed. The respiratory rate was 30 per minute with the head elevated at a 45-degree angle. Prominent supraclavicular and suprasternal soft tissue retraction occurred with each inspiration, which was prolonged and associated with some stridor. These changes and the dyspnea could be relieved only by having the patient sit up and lean forward. The mandible was retracted, resulting in a wide open bite. The upper and lower incisors could be approximated no closer than 3 cm on closing the mouth. No clubbing or cyanosis was evident.

The blood pressure was 160/110 mm Hg, and the pulse was regular at 88/minute. General muscle wasting was evident, together with partial limitation of motion at both shoulders, elbows, wrists, knees, and ankle joints. Ulnar deviation with flexion contractures of the metacarpophalangeal and proximal interphalangeal joints was prominent in both hands. There was no edema, calor, or rubor at any of the joints, including the temporomandibular joints. There were well healed surgical scars at the base of the toes. Some tenderness was present on palpation over the right lower posterior rib cage. No other pertinent changes were discovered on examining this acutely chronically ill woman.

Laboratory findings consisted of hemoglobin, 12.4 gm; hematocrit reading, 35%; white blood cell count, 10,700/cu mm; an essentially normal differential; urinalysis, negative; blood urea nitrogen, 18 mg/100 ml; fasting blood sugar, 124 mg/100 ml; two-hour postprandial blood sugar, 133 mg/100 ml; total serum proteins 7.7 gm/100 ml (globulin, 4.6 gm); nonreactive VDRL test; and normal blood pH, alkaline phosphatase,

phosphorus, Ca^{++}, Na^{+}, Cl^{-}, K^{+}, and CO_2. An electrocardiogram and a LE test were both negative.

On original and follow-up x-ray examinations the heart was found to be normal in size. Other roentgenographic findings were fracture of the right tenth rib posteriorly and thickening of the pleura at the left costophrenic sulcus with linear pulmonary densities, especially at the right lower lobe. These latter changes were considered by the radiologist to be consistent with rheumatoid disease of the lung. Several attempts to acquire adequate roentgenograms of the temporomandibular joints failed, even with the use of planography, because of inability to position the patient properly. Intradermal tests (OT 1:10,000, histoplasmosis, blastomycosis, and coccidiomycosis) were negative at 48 hours.

With the patient under sedation (meperidine hydrochloride administered intramuscularly) and topical analgesia (10% cocaine), Erich bars were applied to the teeth and wired with rubber bands. These bands were removed intermittently to allow the patient to eat. When they were in place, she could assume the recumbent position without dyspnea. Several days after her discharge from the hospital (as the bands lost their elasticity), shortness of breath recurred. This was corrected by the application of new rubber bands. By early December, 1964, she could approximate her incisors on closing her mouth, and dyspnea was no longer a problem. The Erich bars, which had tended to loosen her teeth, were therefore removed.

Rheumatoid therapy consisting of 100 mg of oxyphenbutazone three times daily, 0.6 gm of acetysalicylic acid four times daily, and 400 mg of meprobamate four times daily, has been continued.

Discussion

Numerous causes of partial obstruction of the ventilatory system with resulting dyspnea have been noted by many authors[1-5]. In specific reference to the upper respiratory passage one must consider occlusion by foreign bodies, trauma, polyps, swollen and inflamed mucous membranes, abscesses, septal deformities, adenoids, laryngeal edema, and acute paralysis of the abductors of the vocal cords. Less common causes today than formerly are tuberculous postpharyngeal abscesses, diphtheria, syphilomas, and leprosy of the larynx. Infants may be born with lack of anatomic support for the tongue and become severely dyspneic as a result of pharyngeal obstruction (Pierre-Robins syndrome)[3].

Even though this patient does not present the typical story and findings of the rheumatoid temperomandibular joint syndrome as described by Comroe[6], one must assume that the muscular alterations are the result of her general systemic rheumatoid disease. The spasm and atrophy of the pterygoid muscles resulted in retraction of the mandible, forcing the base of the tongue and floor of the mouth posteriorly into the pharynx and thereby obstructing the flow of air into the upper respiratory passages. Dental malocclusion was the only aspect of this case that resembled Costen's syndrome.[7]

Summary

A case of general systemic rheumatoid disease with arthritis as the major component has been described. Involvement of the craniomandibular musculature eventually led to occlusion of the upper ventilatory system by the floor of the mouth and the base of the tongue. The resulting dyspnea and dental malocclusion were corrected by several weeks' use of Erich bars wired with rubber bands.

Acknowledgement

Dr. James A. Valone of Raleigh applied and managed the Erich bars. He and Dr. Glenn Wilson of Angier were helpful in the treatment of this patient.

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Case Reports from the Committee on Cancer

Sigmoidoscopy in Benign Anorectal Disease

Operative procedures for benign anorectal conditions are among the most common operations performed throughout the United States. Since cancer of the rectum is such a formidable disease, necessitating drastic surgical procedures and equally drastic changes in the patient's physiologic habits, it would seem that any measure to detect early cancer would be extremely valuable.

The following case report illustrates clearly the wisdom of routine sigmoidoscopic examination under anesthesia at the time of surgery for benign anorectal lesions.

A 39 year old woman was seen because of increasing difficulty with prolapsing and bleeding internal hemorrhoids. Examination in the office confirmed the presence of a varicose internal-external hemorrhoidal plexus, with a real tendency of prolapse of the internal hemorrhoidal masses. The patient had complained of almost daily bleedgin with her bowel movement and there were several thin-walled hemorrhoids, one of which clearly evidenced recent bleeding.

The patient was admitted to the hospital and prepared in the usual manner for hemorrhoidectomy, but was also posted for sigmoidoscopy as a routine preoperative examination under anesthesia. After the patient had been anesthetized, the anorectal area was again carefully examined, the sphincter dilated, and the sigmoidoscope introduced. Preparation was excellent and visualization was easily carried out to 20 cm. At the 10 cm level on the anterior lateral wall of the rectum was a 1-cm sessile polyp which appeared to be a typical adenomatous polyp and grossly benign. It was removed with the electrosurgical snare, no significant bleeding resulting. The patient was then prepared and hemorrhoidectomy carried out as originally planned.

For editorial comment, see page 215

The pathologic examination, in addition to masses of hemorrhoids, with some organized thrombi, revealed a definite adenocarcinoma, grade II, beginning in the rectal adenoma. Numerous sections of this tumor were made, showing definite evidence of invasion into the underlying stroma.

As a cancer curative procedure, the patient was offered a combined abdominoperineal resection of the rectum which she accepted and which was carried out approximately three weeks following the hemorrhoidectomy. The patient is now 50 years of age and has gone 11 years with no evidence of recurrence. Recent barium enema study and detailed cancer follow-up failed to reveal any sign of recurrence.

How insignificant hemorrhoids can seem in the face of such an obvious serious problem as this lady might have faced had the polyp gone unrecognized! We suggest a routine sigmoidoscopic examination, unless previously performed, under anesthesia prior to beginning any operation for so-called benign anorectal disease.

Before the nutritional cause of pellagra was proven scientifically, pellagra was to be found even among the rich and persons with a high standard of living. Indeed, our ordinary housewife of today knows more about nutrition and useful dietary practices than did the most imposing medical authority in 1910. But she knows that, thanks to medical research.—Alan Gregg, in *Challenges to Contemporary Medicine*, New York, Columbia University Press, 1956, p. 10.

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MAY, 1965

THE ANNUAL SESSION

The One Hundred Eleventh Annual Session was marked by a new high in effort on the part of the local Hosting Committee to provide all the details designed to satisfy conventioners. Spacious accommodations for exhibits and meetings and adequate parking were available. Even the weatherman cooperated perfectly. "Dr. Kildare" appeared to receive an official award, and to give stimulus to the news media and excite the members of the Auxiliary.

According to the convention photographer, attendance was the best in years, an observation supported by the registration tally, although only 21% of the membership was recorded. Attendance at the General Sessions followed the usual pattern of too many empty seats in spite of erudite and practical discussions on "Urinary Tract Infection" and "Shock," and in-depth essays dealing with philosophical and political matters by eminent speakers. The program lacked neither content nor talented essayists on the podium. A highlight was the panel discussion of medical education, its problems and prospective developments, by the eight past and present deans of the three North Carolina medical schools.

Poor attendance at the General Sessions continues to pose a critical enigma for those responsible for arrangements and programming for the annual meeting of the Society. To be able to produce a mere handful to hear a prominent guest is a source of embarrassment and frustration.

Significant actions of the Executive Council and the House of Delegates involved changes in the Constitution and By-laws to eliminate Scientific Membership and to establish central billing for county, state, and AMA dues. The former issue, under consideration for more than a decade, was finally resolved after an eloquent and historically significant address by a past president of the Society representing the minority opinion. Changes were enacted to preserve the right of a county society to determine its own membership but providing for any qualified physician not accepted by a county society to apply directly for membership in the State Society.

The institution of central billing will permit each county, on a voluntary basis, to have all dues collected through the headquarters office, including the voluntary payment of dues assigned to Ampac and Medpac. This system could portend to future use of computer devices in bookkeeping procedures.

Finally, it could be that the unconfirmed prospect of returning to Pinehurst in 1967 will trigger a revival of interest among doctors to attend the annual meetings.

J. S. R.

Official Registration

Members	738
Guests	53

SAMA	87
Total	878
Technical exhibitors	250
Scientific exhibitors	104
Other guests	114
Auxiliary	335
	803
Grand Total	1,681

* * *

COLONIC TUMORS

Most tumors of the rectum and colon are are within reach of the examining finger and the sigmoidoscope, if only those means are used. The Cancer Committee report in this issue illustrates the good results of proper procedure in treating a person with an adequate explanation for rectal bleeding, but, as it turned out, not the only one.

Another matter raised by this month's report is the nature and treatment of colonic polyps. In the last year or so there has been a renewed outbreak of controversy regarding the malignant potential of colonic polyps. Some regard them as precancerous, others as innocent. The pathologist's report on the polyp of the patient reported indicates that an invasive cancer was present. Some pathologists would scoff, while others would cite instance where such findings were accompanied by lymph node metastasis, at least. In a way, these arguments are not germane to the principle illustrated by the Cancer Committee's patient: she had two diseases which could cause rectal bleeding, and one was discovered only because the surgeon acted as a true student of disease instead of a technician.

* * *

THE ENVIRONMENTAL HEALTH CENTER

At the time of President Kennedy's assassination the JOURNAL had in type an editorial about the skirmishing for an environmental health center between the Washington hierarchy and several interested states. The editorial was abandoned because it was geared to the actions of President Kennedy. Its essence was that various newspaper columnists ascribed the continuance of North Carolina's bid for the health center to an alleged political debt incurred by President Kennedy which put Governor Sanford in a favorable position to ask consideration for this state. Our comment was that we hoped that other things entered into North Carolina's continuance in the race, such advantages as a salubrious intellectual and atmospheric climate and readily available library resources and consultation. The decision to locate at least part of the center here (can centers have parts?) seems to support our view, though it would be naive to think that politics didn't enter into the decision. Whatever the proportions of politics and virtues in the last analysis, we welcome the center and its staff to our state and look forward to getting acquainted.

* * *

ARE TEETH JUST FOR CHEWING?

Every, writing in *Lancet* for March 27, 1965, presents a series of hypotheses concerning the teeth as weapons. In his opinion much of the significance of various facial expressions, and even of facial development, is lost without the realization that teeth are part of man's armament. Thus lateral movements of the jaw produce a sharpening action and can be related to sneering. The growing of beards enhances the overall fearsomeness of a set of vicious teeth. The effect of the teeth on the voice is part and parcel of the "weapons system," as Pentagon jargon might put it.

At first glance one might tend to dismiss this sort of observation as as idle fancy or an elaborate hoax, but the idea is provocative (in such circumstances it is better not to say "food for thought" or "grist for mill"). As we watch goateed basketball players toss each other around, karate experts displaying their canines, and think of Mussolini with his chin thrust out, the idea becomes more plausible. Perhaps the old suggestion that peace conferences would be less pompous if the negotiators were devoid of clothes should be modified to include a stipulation that they be toothless as well.

Bulletin Board

Coming Meetings

Tri-State Medical Association—The Carolinian Hotel, Nags Head, June 7-9.

Mountain Top Medical Assembly—Waynesville, June 17-19.

Duke Medical Mycology Course—Duke University Medical Center, Durham, July 5-31.

Duke Medical Postgraduate Course—Morehead City, July 12-17.

North Carolina and South Carolina Societies of Ophthalmology and Otolaryngology—Myrtle Beach, September 12-14.

Charlotte Postgraduate Seminar—Presbyterian Hospital, September 29-30.

Fifth District Medical Society, Annual Meeting—Mid Pines Club, Southern Pines, October 6.

North Carolina Academy of General Practice Annual Meeting—Jack Tar Hotel, October 31-November 2.

North Carolina Pediatrics Society, Annual Meeting—The Mid Pines Club, Southern Pines, November 5-6.

Academy of Psychosomatic Medicine, Annual Meeting—Sherman House, Chicago, October 11-13.

New Members of the Society

The following new members joined the Medical Society of the State of North Carolina during the month of March, 1965:

Drs. Thomas Lawrence Clarke, ObG, 1225 E. 5th St., Winston-Salem; Dean Cale Waters, ObG, 224 S. Main St., Mt. Airy; James Hollins Lipsey, Jr., 283 Biltmore Ave., Asheville; Joe Dan Hughes, ObG, Norris-Biggs Clinic, Rutherfordton; Albin Willard Johnson, Oph, 1300 St. Mary's St., Raleigh; Theodore Albert Barker, GP, Laurel St., Grover; George Martin Leiby, I, 918 Vermont St., Smithfield; Lyndon Kirkman Jordan, GP, 372 S. 3rd St., Smithfield; Rawl Cesar Aizcorbe, GP, 130 N. Main St., Belmont;

Also, Drs. Bennett A. Hayes, ObG, 1643 Owen Dr., Fayetteville; Luther Cook Sappenfield, Jr., Oph, 1620 Owen Dr., Fayetteville; Wm. H. Newman, S, 520 Owen Dr. Fayetteville; Charles Lewis Baird, Jr., Watts Hospital, Durham; Glenn Edgar Hair, S, UNC School of Medicine, Chapel Hill; David Coston Sabiston, Jr., S, Duke University Medical Center, Durham; Alexander Spock, A, Duke University Medical Center, Durham; William Waldo Skeen, GP, Box 94, Denver; Hubert G. Pierce, I, 407 N. Herman St., Goldsboro;

Also, Drs. Virginia Sanford Mangum, Pd, Cherry Hospital, Goldsboro; James Robert Dineen, S, Doctors Circle, Wilmington; James T. Best, GP, Sea Level General Hospital, Sea Level; Philip H. Creech, GP, Newport Medical Center, Newport; James R. Norton, GP, Cannon Memorial Hospital, Banner Elk; James Miller Ross, Hickory Memorial Hospital, Hickory; Fred Smith Gachet, Jr., ObG, 17 2nd Ave., NE, Hickory; Robert Hugh Farley, S, 309 E. Wendover Ave., Greensboro; Henry Jackson Ritchie, 31 Patton Ave., Concord.

News Notes from the Duke University Medical Center

The Duke University Medical Center has received a $750,000 grant from the Commonwealth Fund of New York to help finance a pioneering approach to medical education.

The Duke program will involve the first major change in medical school curricula in the past 50 years, according to Dr. William G. Anlyan, dean of the Duke School of Medicine.

Essentially, the new curriculum will allow medical students to cover in two years the same areas it now takes them four years to cover. In their third and fourth years, they will work as a team with faculty members for in-depth study of sciences and disciplines closely related but separate from their chosen branch of medicine.

They will not really begin training for general practice or specialties until their intern and residency training years.

* * *

Dr. Andrew G. Wallace, an associate in medicine at Duke University, has been selected by the Markle Foundation of New York to receive a five-year scholarship. The announcement was made by Dr. William G. Anlyan, dean of the Duke University School of Medicine.

To be administered by the medical school, the $30,000 scholarship is expected to be used to further heart research activities in which Dr. Wallace is engaged and to aid in the development of an intensive care unit at Duke for heart attack victims.

Dr. Wallace is co-author with Dr. Stanley J. Sarnoff of "The Nervous Control of the Heart," a 300 page book just off the press. Dr. Sarnoff is chief of the laboratory of cardiovascular physiology, National Heart Institute, Bethseda, Md.

A graduate of Duke University and the Duke School of Medicine, Dr. Wallace is author of more than a score of research articles in the fields of physiology and microphysiology of the heart. He has been on the Duke Medical Center staff as an associate in medicine since 1963. Immediately prior to this he was an investigator for the National Heart Institute from 1961-63.

* * *

Dr. Charles Ronald Stephen, Chief of the Division of Anesthesiology of Duke University Medical Center, has been elected a Fellow of the Faculty of Anaesthetists in the Royal College of Surgeons of England. With the honor, he became only the fourth person in the United States to receive the FFARCS degree.

Well known for some 125 articles published in the field of anesthesiology, Dr. Stephen is also

author of the book "Halothane" in association with Dr. David M. Little, Jr., of Hartford Hospital, Connecticut.

In 1946, Dr. Stephen received certification in anesthesia from the Royal College of Physicians and Surgeons, Canada, after receiving the diploma from the Royal College of Physicians and Surgeons in London, England a year earlier. He is a native of Montreal, Canada.

* * *

Dr. Howard K. Thompson, Jr., associate in medicine and associate in physology at Duke University Medical Center, has won the $30,000 Lederle Medical Faculty Award for 1965-1966.

Purpose of the awards is to "provide opportunities for development of promising individuals as full-time faculty members and to provide recognition and incentive for outstanding clinical teachers and scholars."

Dr. Thompson is a graduate of Yale University and the Columbia College of Physicians and Surgeons. In 1961 he attended the Massachusetts Institute of Technology under a special training fellowship in biophysics.

The award, presented by the Lederle Division of American Cyanimid Co., will provide financial assistance for a three-year period.

* * *

Dr. Lenox D. Baker, professor and chief of orthopaedic surgery at Duke, was one of six native Texans who were honored at the 50th anniversary meeting of the Texas Medical Society held in Dallas in April.

Dr. Baker delivered two scientific papers at the meeting: "Blood Vessel Injuries Associated with Fractures" and "Care of the Injured Athlete."

Also in April Dr. Baker was a guest speaker at the Tennessee State Orthopaedic Society meeting in Chattanooga, where he spoke on "Care of Injuries to the Ankle and Knee."

News Notes from the University of North Carolina School of Medicine

Dr. Reginald G. Mason, instructor in pathology at the University of North Carolina has been selected as one of 25 Markle Scholars for 1965 by the John and Mary R. Markle Foundation of New York City. In receiving the appointment he became the tenth Markle Scholar at the UNC School of Medicine.

Each appointment provides a $30,000 grant to the medical school where the scholar will teach and do research. Funds will be paid at the rate of $6,000 a year for five years "to assist in his development as teacher, investigator and administrator."

Other Markle Scholars on the medical faculty are Dr. John B. Graham, Dr. Walter Hollander, Jr., Dr. William D. Huffines, Dr. William E. Lassiter, Dr. George D. Penick, Dr. Isaac M. Taylor (now dean of the school), Dr. Judson Van Wyk, Dr. T. Franklin Williams, and Dr. Robert Zeppa.

* * *

A UNC anatomy professor has been appointed by the U. S. Atomic Energy Commission to write a book about the effects of fallout on the human body.

Dr. Charles D. Van Cleave, professor of anatomy at the UNC School of Medicine, has a contract to write "Late Somatic Effects of Ionizing Radiation."

Under the auspices of the AEC, he published in 1963 a book entitled "Irradiation and the Nervous System."

Dr. Van Cleave was granted a two-year leave of absence in 1957 to work with the AEC in Washington, D. C., on a study of bone metabolism and bone marrow replacement therapy as related to radioactive fallout following nuclear weapons tests.

* * *

The Robert A. Ross Obstetrical and Gynecological Society has been organized with Dr. John A. Kirkland of Wilson as the first president.

The new society is named in honor of Dr. Robert A. Ross and in recognition of the invaluable services he has rendered to the University of North Carolina and to the many physicians who have studied under his guidance.

Dr. Ross, professor and chairman of the Department of Obstetrics and Gynecology since 1952, will retire as department chairman in July, but will continue as professor of obstetrics and gynecology.

Dr. Arthur R. Summerlin of Raleigh was elected vice president and president-elect at the organizational meeting, and Dr. William E. Easterling, Jr., a Raleigh native now on the medical faculty at the UNC School of Medicine, is secretary-treasurer.

In addition to the officers, the executive committee is composed of Dr. Robert G. Brame of Winston-Salem and Dr. James A. Burrus of Shelby.

The purpose of the 70-member society is to promote scientific knowledge and to afford memmembers an apportunity to keep informed on recent advances in obstetrics and gynecology.

The active membership consists of physicians who are or have been on the teaching and residency staff in the UNC Department of Obstetrics and Gynecology.

* * *

New appointments to the faculty, a promotion, and a resignation at the School of Medicine were recently approved by trustees of the Consildated University.

The School of Medicine is adding three faculty members: Dr. Henry Neil Kirkman, a native of Jacksonville, Fla., now at the University of Oklahoma School of Medicine, will become a professor of pediatrics beginning June 1; Dr. Ralph W.

Stacy of Middletown, Ohio, and a faculty member at N. C. State in Raleigh since 1962, will become a professor of surgery in biomathematics and physiology beginning July 1; and Dr. Joseph Stephen Pagano of Rochester, N. Y., formerly at Philadelphia (Pa.) General Hospital, is a new assistant professor of bacteriology.

Marjory W. Johnson of Bunn, a physical therapist here since 1961, was promoted to assistant professor at the School of Medicine.

Dr. Gordon T. Stewart, outstanding epidemiologist, pathologist and biochemist from Carshalton, Surrey, England, was appointed a professor in the School of Medicine and the School of Public Health. He has been a visiting professor here under a National Science Foundation fellowship since last fall.

The resignation of Dr. George P. Vennart, to become chairman of the Division of Clinical Pathtology at the Medical College of Virginia was accepted.

Carl W. Gottschalk, M.D., professor of medicine and physiology at UNC and career investigator of the American Heart Association, delivered the Annual Jean Redman Oliver Lecture at the State University of New York Downstate Medical Center in Brooklyn on March 29. He spoke on "Micropuncture Studies of the Abnormal Kidney."

Dr. Gottschalk is section editor on kidney, body fluids, and electrolytes of the *American Journal of Physiology* and the *Journal of Applied Physiology* and is on the editorial board of *Physiological Reviews.*

* * *

The first full year that N. C. Memorial Hospital here offered its services to the state, 48 women with cancer registered with the gynecological tumor clinic.

Last year—11 years later—the number quadrupled. A record-breaking 199 women with cancer sought treatment in the clinic.

"This number represents only women and only those women with cancer in the pelvis," emphasized Dr. Robert A. Ross, chief of the hospital's obstetrics and gynecology service.

Including the first partial year of the hospital's operation in 1952, clinic records show that 1,634 women have been seen for cancer of the cervix, ovaries, vagina, vulva and lining of the uterus.

Patients with breast cancer or other cancers outside the pelvic region are not included in the records of the gynecological tumor clinic. Nevertheless, half of all cancer patients seen at N. C. Memorial Hospital are seen in this specialized clinic for women.

* * *

Dr. Charles E. Flowers, Jr., professor of obstetrics and gynecology at UNC was one of five members of the guest faculty for a spring symposium recently at the University of Oklahoma Medical Center.

Dr. Flowers discussed the effects of diabetes during pregnancy, the use of anesthesia during delivery, and the magnitude of the maternal mortality problem.

* * *

A novel adventure in teaching reality to children with severe mental and emotional disturbances will be continued for another year at the University of North Carolina Psychiatric Center under a new federal grant of $23,071.

The National Institute of Mental Health has awarded the funds to Dr. Eric Schopler, pschologist, and Dr. Rex Speers, director of child psychiatry, for the third year of an effort to develop a teaching-learning process for psychotic children.

* * *

The use of delicate electronic instruments on the surface of a child's chest to detect heart ailments was explained in Chicago recently at the golden anniversary meeting of the Americal College of Physicians.

The special detection technique was described by Dr. Ernest Craige, a heart specialist at UNC, and Dr. Roland Schmidt, formerly of UNC and now at the University of West Virginia School of Medicine.

Dr. Craige and Dr. Schmidt spoke at a special clinical session devoted to disease of the heart and blood vessels.

News Notes from the Bowman Gray School of Medicine of Wake Forest College

Dr. Robert S. Altman has been appointed to the faculty of the Bowman Gray School of Medicine as instructor in pediatrics and associate in obstetrics and gynecology.

He will serve as pediatric investigator with the medical school's recently established Maternal Rubella Study Section.

The project, the largest study ever attempted on the relationship between German measles and birth defects, was initiated by Dr. Frank R. Lock, professor and chairman of the Department of Obstetrics and Gynecology. It will be supported for a two-and-one-half-year period by a $105,423 grant from The National Foundation-March of Dimes.

Comprehensive studies will be made on more than 700 cases in which pregnant women had rubella or were exposed to it during the epidemic which struck North Carolina in the winter and spring of 1964.

Dr. Altman, who holds the B.S. degree from the University of Florida and the M.D. degree from Duke University School of Medicine, will conduct thorough examinations on the babies born to these women. He will also examine other children in each family as controls.

The project is designed to answer these two questions:

—At what period during pregnancy does German measles result in the greatest risk of birth defects?

—Are gamma globulin injections, given to the mother after her exposure to German measles, effective in protecting the baby from defects caused by the disease?

* * *

Clyde T. Hardy Jr., associate dean of the Bowman Gray School of Medicine, has been appointed a contributing editor for *Medical Economics*, a journal which is circulated to every practicing physician in the United States.

Hardy, director of the medical school's Department of Clinics, is past president of the National Association of Clinic Managers.

As one of nine contributing editors on the *Medical Economics* staff, he will write feature articles on the economics and mangement of medical practice and will also review manuscripts submitted by other writers.

* * *

Dr. Richard C. Proctor, professor and chairman of the Department of Psychiatry at the Bowman Gray School of Medicine, is co-author of a new book on psychiatry.

The book, "The Mentally Ill Employee—His Treatment and Rehabilitation," was released this week by Hoeber Medical Division, Harper and Row Publishers, New York City.

Designed for industrial supervisors and personnel directors and as a resource work for industrial physicians, it provides a guide for the management of workers who have psychiatric problems.

The 110-page book was prepared by the American Psychiatric Association's Committee on Occupational Psychiatry. Collaborating with Dr. Proctor were Dr. Alan A. McLean, Armonk, N. Y.; Dr. John MacIver, Pittsburgh, Pa.; Dr. Clarence J. Rowe, St. Paul, Minn.; Dr. Graham C. Taylor, Montreal, Canada; and Dr. Stanley Yolles, Bethesda, Md.

Ronel L. Lewis, a sophomore medical student at the Bowman Gray School of Medicine, has been awarded the Eben J. Carey Memorial Award in Anatomy.

The honor is presented annually in each chapter of Phi Chi Medical Fraternity to the student having the highest average in anatomy during his freshman year of medical school. Lewis, a Reynolds Scholar and a native of Durham, represents the Tau Kappa Chapter.

* * *

Nine sophomore students at the Bowman Gray School of Medicine have been awarded $600 scholarships by the Duke Endowment to support summer externship training at community hospitals.

The scholarship winners, listed with their externship hospitals are:

—Charlotte Memorial Hospital: John Faris and James Starling.

—Moses H. Cone Memorial Hospital, Greensboro: Jan Eberhard, Gerry Martin and John Scott.

—Forsyth Memorial Hospital, Winston-Salem: Thomas Brown, Carl Hoffman and Phillip Miller.

—Greenville (S. C.) General Hospital: Richard Hooper.

* * *

Twenty-one scientists, including some of the top primatologists in the country, participated in a recent conference on "Reproduction in the Squirrel Monkey" at the Bowman Gray School of Medicine.

Coordinators for the conference were Dr. Robert W. Cooper, director of the Primate Research Colony, San Diego (Calif.) Zoological Society; and Dr. Leonard A. Rosenblum of the Primate Behavior Laboratory, State University of New York, Brooklyn.

Participants included Dr. Charles M. Goss, professor and chairman of the Department of Anatomy, Louisiana State University School of Medicine, and Dr. W. C. Osman Hill, associate director of the Yerkes Regional Primate Research Center, Emory University.

Goss is editor of "Gray's Anatomy." Hill is author of "Comparative Anatomy and Taxonomy of Primates," which has been published in five volumes.

Also in attendance was Dr. D. E. Beischer, head of the Chemical Sciences Division, U. S. Naval School of Aviation Medicine, Pensacola, Fla. He is responsible for the care and study of "Baker," famed squirrel monkey of the space program.

* * *

Dr. William H. Boyce, professor of urology, recently served as visting professor of urology at Cleveland Clinic, Cleveland, Ohio. While there he participated in a postgraduate course on "Advances in Urology," presenting lectures on "The Management of Exstrophy of the Bladder" and "The Management of the Problem Patient with Renal Calculi."

* * *

Dr. Richard L. Burt, professor of obstetrics and gynecology, presented a paper on "Carbohydrates-Lipid Interrelationships" at a March 18 meeting of the Maryland Obstetrical and Gynecological Society, Baltimore, Md.

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Dr. Harold D. Green, professor and chairman of the Department of Physiology, was a member of the guest faculty for a recent Symposium on Shock in Los Angeles, Calif. He lectured on "The Peripheral Circulation During Shock" and participated in a round-table discussion on "Clinical Applications of Current Research to Treatment of Patients in Shock."

* * *

Dr. Frank C. Greiss Jr., assistant professor of obstetrics and gynecology, was member of the guest faculty for a Postgraduate Course in Obstetrics and Gynecology at the Medical College of Georgia. He lectured on "Influence of Labor on Fetal Well-Being," "Pathophysiology of Hemorrhage," and "Effects of Therapy for Hypotension Complicating Spinal Anesthesia."

* * *

Dr. James A. Harrill, professor of otolaryngology, spoke on "Hearing Problems Including Ear Infections" and "Maxillo-Facial Injuries" at a recent Postgraduate Course in ENT for General Practitioners at the Medical College of South Carolina.

* * *

Dr. James F. Toole, professor and chairman of the Department of Neurology, has been invited to deliver the George E. Brown Memorial Lecture at the American Heart Association's annual Scientific Sessions Oct. 15-17 in Bal Harbour, Fla. He will speak on "Inter-Arterial Shunts in the Cerebral Circulation."

Dr. Toole recently spoke on "Diagnosis of Carotid, Basilar and Subclavian Steal Syndromes" at the 16th annual Postgraduate Day program at Roanoke (Va.) Memorial Hospitals.

News Notes from the American Medical Association

The U.S. medical profession, the pharmaceutical industry and the Food and Drug Administration (FDA), are cooperating to establish a major addition to existing adverse drug reaction reporting programs.

A Registry of Tissue Reactions to Drugs will be established within the Armed Forces Institute of Pathology (AFIP) in Washington. Joint sponsors are the American Medical Association, FDA and the Pharmaceutical Manufacturers Association. The AFIP has the world's largest repository of pathologic material for research and education.

"This unique cooperative effort for the benefit of the American public is the first between major drug manufacturing, drug prescribing and drug regulating bodies," said a joint statement issued by Dr. Jean Weston, director of the AMA's De-



for psychiatric treatment

Peachtree Hospital, located in Atlanta, Georgia, is a complete psychiatric, alcoholic and drug addiction treatment facility accredited by the Joint Commission on Accreditation of Hospitals ☐ The hospital has 65 beds, 47 of which are devoted to the care of psychiatric patients and 18 of which, in a separate area, are for patients with acute cases of chronic alcoholism or drug addiction ☐ Treatment procedures include psychotherapy, electroconvulsive shock therapy, subinsulin coma and chemotherapy ☐ *We will be pleased to provide further information upon request.*

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partment of Drugs; Dr. Joseph Sadusk, FDA medical director, and Dr. Austin Smith, president of the Pharmaceutical Manufacturers Association.

The purpose of the Registry will be to obtain autopsy or biopsy tissue specimens from suspected adverse drug reaction cases. The material will be thoroughly studied by all methods available to a full-time pathologist, including consultation with other authorities in pathology and toxicology. Results of the studies will be reported to local pathologists who furnished the study material, and monthly summary reports will be made to each of the three sponsoring organizations. The pathologic material will remain on file at the Registry for future reference and study.

The tissue registry will augment the existing drug reaction reporting programs maintained by the AMA and FDA. The FDA at present receives reports of suspected adverse drug reactions from about 500 cooperating federal and military hospitals, and from 110 civilian hospitals under contract. The AMA receives such reports from physicians in private practice, a number of hospitals not reporting to FDA, and other sources.

Information is exchanged by the FDA and AMA, catalogued by data-processing techniques, and filed by data-processing machines. The data are then available for use in: identifying drugs possibly associated with adverse reactions; assisting physicians to diagnose possible adverse drug reactions; and, scientific investigations.

* * *

The American Medical Association recently announced the winners in its $5,000 medical journalism awards contest. Prizes were awarded in five categories, as follows:

—Newspapers: Mildred Spencer, Buffalo (N.Y.) Evening News, "for outstanding excellence in medical reporting throughout the year."

—Magazines: John and June Robbins, for an article in Good Housekeeping, "Teenage Suicide: A Special Report."

Editorial writing: Harvey A. Call, Pompano Beach (Fla.) Sun-Sentinel, for an editorial on "Diabetes Week Can Aid Many Unknown Cases."

Radio: Station WFBM, Indianapolis, Ind., for a program entitled "Indianapolis Report: New Gyn Clinic Opens."

Television: Station WRCV, Philadelphia, for a program entitled "The Child Killer."

Among those receiving special commendations from the judges was Jay Jenkins, of the Charlotte (N.C.) Observer.

* * *

A new publication, "Reviews of Medical Motion Pictures," is now available on request from the Film Library of the American Medical Association, it was announced recently.

"Reviews" is not a list of films approved or disapproved by the AMA. It offers a brief description and a frank, unbiased evaluation of motion pictures which are available to the medical profession.

Copies of the review publication may be obtained from the Film Library, American Medical Association, 535 N. Dearborn St., Chicago, 60610.

American Board of Obstetrics and Gynecology

The next scheduled Part I (written) examination will be held at various examining centers in the United States, Canada, and military bases outside of the continental United States on Friday, July 2, 1965, at 10:00 A.M.

Apllications received for the next Part II examination to be given in Chicago, Illinois in April of 1966 will be reviewed by the Credentials Committee in September and notifications will be mailed to candidates on or about October the first.

The 1965 Bulletin outlining current requirements should be avilable upon request about July the first. Application forms and Bulletins may be obtained by writing the Office of the Secretary. Applicants are urged to familiarize themselves with the current rules and regulations, particularly in view of the changes in application and examination schedules effective this year.

Diplomates of this Board are requested to keep the office of the Secretary informed of their current address. Write Clyde L. Randall, M.D., Secretary and Treasurer, American Board of Obstetrics and Gynecology, 100 Meadow Road, Buffalo, New York 14216.

U. S. Department of Health, Education, and Welfare

Every day hundreds of travelers run into delays in quarantine. The reason: They fail to present a valid international certificate of vaccination—next to the passport and the visa, the most important document for world travel.

In the United States the certificates is published as Public Health Service form 731, "International Certificates of Vaccination," revised June 1961. The form is given out with the passport application. It may also be obtained from local and state health departments or from offices of the U. S. Public Health Service. In addition, it may be bought from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402, at ten cents a copy. Travel agencies and transportation companies wishing to provide the form as a service to their clients may buy copies at $5.00 per hundred.

Additional information on required and recommended immunizations and on health precautions for international travel is available in leaflets issued by the Division of Foreign Quarantine for travel in Asia, in Europe, in Africa, and in Latin

America; in a leaflet entitled "So You're Going Abroad;" and in a booklet entitled "Immunization for International Travel." Copies may be bought from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402. The leaflets sell for five cents apiece or $3.75 per hundred, and the booklet sells for 35 cents. We would be glad to send you single free copies of the leaflets on request.

American Hospital Association

"People—Heart of the Hospital" is more than a theme for this year's observance of National Hospital Week. It's in action every week in the year.

"People serving people is basic to hospital service," says Dr. Edwin L. Crosby, director of the American Hospital Association, in commenting on the annual observance set for the week of May 9-15.

National Hospital Week gives people who are not seeking medical care the opportunity to see a hospital at work, Dr. Crosby said. The observance is designed to extend public understanding of hospitals.

"Even though science and technology contribute remarkably to patient care, people continue to be the most important element of the hospital," Dr. Crosby said.

Asks More Weight Be Attached To Family Doctors' Views Of New Drugs

The "bedside judgments" of the nation's family doctors are as helpful in evaluating new drugs as some highly-controlled, "elaborately-computerized" clinical tests, the 17th scientific assembly of the American Academy of General Practice was told at its recently concluded annual meeting.

Dr. Theodore G. Klumpp, who served as chairman of the Hoover Commission's Medical Services Task Force, urged the Academy's members to play a more active role in testing new medicines, both during and after the experimental stage. He asked more of them to inform the Food and Drug Administration and individual pharmaceutical manufacturers of what he termed their "experienced evaluations of the value of new drugs that have been tested on your own patients."

Dr. Klumpp, president of Winthrop Laboratories, a division of Sterling Drug Inc., deplored the growing tendency to treat drugs as a "whipping boy".

The number of highway deaths in 1964 soared to 48,000. In addition, according to a survey by The Travelers Insurance Companies, 3,840,000 persons were injured.

Scientists Honor World Health Organization At Sterling-Winthrop Institute

Public health officials representing the Federal and New York State governments joined with medical educators and research secientists in special ceremonies during World Health Week in April to mark the 17th anniversary of the World Health Organization (WHO) of the United Nations.

Host for the occasion was the Sterling-Winthrop Research Institute, the research center for the world-wide operations of Sterling Drug Inc. The United Nations had proclaimed World Health Week in order to pay tribute to the progress made by WHO in helping fight disease and raise health standards of the world's population.

Classified Advertisments

Needed — general physician — family internship by four-man group in growing rural program in West Virginia. Modern clinic facilities, regular visiting specialist consultant staff, scheduled training and vacation periods, foundation sponsorship, no investment required. Starting net income range $14,000 through $18,000 depending on qualifications. Reply in care of the Journal, P. O. Box 790, Raleigh, N. C.

For Sale: Fischer 75 MA X-ray-Fluoroscopy Unit and all accessories. Fischer Diathermy Burdick EK2 Electrocardiograph. C. T. Harris, Jr., M.D., 425 Roberts Street, Salisbury, N. C.

Wanted July 1, 1965 G. P. or Internist to assume large clinic practice. Doctor leaving to specialize. Excellent Opportunity with guarantee of $1,000.00 minimum from start, much more possible. Communicate Director, Midway Clinic, Canton, N. C.

SPACE AVAILABLE, Medical Arts Center, Fayetteville, N. C. Suitable for General Practice or specialty. Modern building,in established medical center. Physicians in private practice in area. For information, write Box 3514, Fayetteville, North Carolina.

General Practitioner—excellent opening for additional general practitioner in Tarboro, North Carolina; fully accredited hospital adjacent to modern clinic building; attractive remuneration and early partnership. Contact Mr. R. M. Thomas, Clinic Manager, Tarboro Clinic, Tarboro, North Carolina.

More than 3,840,000 persons sustained injuries in automobile accidents last year. Driver error and lack of judgment were responsible for more than 85% of the highway casualties in 1964.

The Month in Washington

The House has passed legislation (H.R. 6675)to provide federal health care for the aged that goes much farther than the King-Anderson bill the Johnson Administration originally asked Congress to approve.

The key House vote as far as the King-Anderson provision was concerned was on substitution of a Republican insurance plan which included some features of Eledercare which was sponsored by the American Medical Association. The vote was 236 to 191 against the GOP substitute.

The vote on final House passage of H.R. 6675 was 313 for and 115 against.

After nearly two months of hearings behind closed doors, the House Ways and Means Committee on March 23 approved the "three-layer cake" program which included a modified version of the King-Anderson bill, a supplementary government-subsidized health insurance plan for the elderly, and an extensive expansion of the federal-state Kerr-Mills Program.

The committee vote was strictly on party lines—17 Democrats for the catch-all package and eight Republicans against it.

Despite a tremendous flood of letters from the public in favor of the AMA's Eldercare plan for comprehensive health insurance for the elderly under Kerr-Mills, the House committee didn't take a vote on H.R. 3727—the Herlong-Curtis Eldercare bill.

President Johnson quickly gave Administration support to the committee bill and asked for speedy approval by Congress.

The Administration-approved legislation would provide compulsory social security coverage, effective Jan. 1, 1966, for self-employed physicians and for interns and residents.

It also would increase, retroactive to Jan. 1, 1965, social security cash benefits by 7% across-the-board, with a minimum increase of $4 a month for an individual.

The wage base on which social security taxes are paid would be increased Jan. 1, 1966, from $4800 to $5600, and Jan. 1, 1971, to $6600.

From the Washington Office of the American Medical Association.

The tax rate on the new wage bases would be increased as follows:

	Self-Employed		Employee-Employer (Each)	
	Present	Proposed	Present	Proposed
1966	6.2	6.35	4.125	4.35
1967	6.2	6.50	4.125	4.50
1968	6.9	6.50	4.625	4.50
1969-72		7.1		4.90
1973-75		7.55		5.35
1976-79		7.60		5.40
1980-86		7.70		5.50
1987 & thereafter		7.80		5.60

The social security tax paid by employees and employers each would be increased next Jan. 1 from the present $174 per year to $243.60. The tax on a self-employed individual would be increased from $259.20 to $355.60.

In 1971, when the taxable wage base would be increased to $6600, the employee and employer would be paying a tax of $323.40 each, and the self-employed individual would be paying a tax of $468.60.

The legislation would provide:

King-Anderson Section

Eligible: Persons 65 years and older

Benefits: Inpatient hospital services for up to 60 days in semiprivate accommodations (two- to four-bed) during a spell of illness, subject to a deductible, which until 1969 would amount to $40.

—Post-hospital extended care services for up to 20 days during any spell of illness in a facility which has in effect a transfer agreement with one or more hospitals or which a state agency finds has attempted to enter into such an agreement. This benefit could be extended for a period of up to an additional 80 days under circumstances described below.

—Post-hospital home health services for up to 100 visits during a one-year period following hospitalization.

—Outpatient hospital diagnostic services during a 20-day period subject to a deductible equal to one-half the deductible for inpatient hospital services.

Inpatient hospital services, post-hospital home health services, and outpatient hospital diagnostic services would begin in July 1, 1966. Post-hospital extended care services would begin in Jan. 1, 1967.

Supplementary Insurance Section

Eligible: Persons 65 years and older.

Cost to beneficiary: $3.00 a month, first $50 of medical bills covered and 20 per cent of total above $50.

Benefits: Payment to the individual or to the provider of services for: (a) physicians' services, and (b) medical and other health services other than those by a provider of services as defined in the bill;

—Payments to providers of services for: a) inpatient psychiatric hospital services for up to 60 days during a spell of illness, (b) home health services for up to 100 visits during a calendar year, and (c) medical and other health services furnished by a provider of services or by others under arrangements.

—No payment could be made under this program for any services for which the individual is entitled to have payment made under the King-Anderson section.

Administration: The secretary of Health, Education and Welfare would have to enter into contracts with carriers to administer the program.

Expanded Kerr-Mills

This program would combine all the vendor medical provisions for the blind, disabled, and families with dependent children under a uniform program and matching formula. The federal matching share for cash payments for these needy persons would also be increased; services for maternal and child health, crippled children, and the mentally retarded would be expanded; a five-year program of "special project grants" to provide comprehensive health care and services for needy children of school age, or pre-school would be authorized; and present limitations on federal participation in public assistance to aged individuals in tuberculosis or mental disease hospitals would be removed under certain conditions.

Dr. Donovan F. Ward, president of the American Medical Association, said on House passage of H.R. 6675:

The development of this bill and its passage by the House have been characterized by unrestrained haste. It is unfortunate that the American people have been denied the opportunity to learn through public hearings just how this legislation would affect their lives. The people do not understand this bill, and it is doubtful that the members of the House of Representatives can have acted with a clear comprehension of how it would affect the nation's health, how it would affect the practice of medicine or whether physicians would be able to provide high-quality medical care under the restrictions and controls it would impose on them.

We are opposed to increasing taxes on wage earners to pay hospital bills for everyone over 65, regardless of their income. We are opposed to centralizing control over hospitals and doctors under a federal bureaucracy. We believe in helping the elderly who need help through a program, such as Eldercare, which is administered by the states, not controlled from Washingtonton. Public opinion surveys clearly show that a majority of the American people agree with our position.

We hope the Senate will proceed with caution and will conduct full and fair public hearings so that this bill can be thoroughly understood by everyone. We hope that the legislation which finally emerges will be sound and just, and will reflect the desire of a majority of the people.

In Memoriam

John Atkinson Ferrell, M.D.

Dr. John A. Ferrell, public health pioneer, died February 17, at Rex Hospital in Raleigh.

John Atkinson Ferrell, physician and public health administrator, was born at Clinton, N. C., December 14, 1880, son of James Alexander and Cornelia (Murphy) Ferrell. His father (1832-1923) was a merchant-farmer; his mother was a daughter of Hanson Finla, M.D., of Pender County, N. C.

Dr. Ferrell was educated in the University of North Carolina, where he was graduated B.S., in 1902, and M.D., in 1907. Later, in 1919, he was graduated with the degree of D.P.H. (Doctor of Public Health) by Johns Hopkins University School of Hygiene and Public Health, the first occasion on which this institution conferred this degree, and was the one and only graduate that year.

For three years, (1902-1905), he was engaged in teaching and as superintendent of schools in Sampson County, North Carolina, and, during this time, entered upon the study of medicine.

He began practice in Kenansville, in 1907, and in the same year was made superintendent of health of Duplin County.

In 1909 John D. Rockefeller provided the funds for the control in the South of hookworm disease, which had been found so prevalent as to

become a menace to the social and economic progress of that area. The Rockefeller Sanitary Commission was formed to carry out the purpose of the benefaction and Dr. Ferrell was chosen, early in 1910, to have direction of educational and control measures in North Carolina with the title of Assistant Secretary of the State Board of Health.

Although the disease, except among physicians, was little known, his pioneering efforts resulted, during the period 1910-1913, in educating the people throughout the State regarding the disease, its mode of spread and methods for its prevention and cure, and in the microscopic examination of 320,872 persons, of whom 160,689 were found to be infected and were treated.

Upon the organization in 1913 of the International Health Board of the Rockefeller Foundation, to extend throughout the world such health work as had been conducted by the Rockefeller Sanitary Commission in the South and also to embrace activities in the whole field of public health, Dr. Ferrell was made Director for the United States. During his period of service, 331 full-time county organizations were established, toward 226 of which the Foundation contributed directly.

Dr. Ferrell, although active in the general field of public health, featured the strengthening of the State Health Departments and especially the establishment, development, and extension of county health service.

As Associate Director of International Health for the Rockefeller Foundation, Dr. Ferrell directed this Foundation's interests in the United States, Canada, and Mexico until 1944. From 1944 to 1946, he served as Medical Director of the John and Mary R. Markle Foundation.

On October 1, 1946, he began a span of more than ten years as executive secretary of the North Carolina Medical Care Commission. In this position, he directed the use of Hill-Burton funds in this state in the construction of 127 hospitals with an overall capacity of 6,567 beds, 41 nurses' residences, 3 diagnostic and treatment centers and 76 health centers—a total of 247 health projects involving an expenditure of $95,931,033.

He retired February 1, 1957, and he and his wife had been living in Raleigh since that time.

His activity in professional organizations is illustrated by his membership in the American Medical Association (Chairman, Public Health Section, 1922-23), the American Public Health Association (Member of Council 1926-29), the Southern Medical Association, the North Carolina State Medical Society (Secretary, 1911-13), the New Jersey State Medical Society, the National Malaria Committee (Chairman, 1924), and the Royal Society of Public Health.

The University of North Carolina gave to Dr. Ferrell its Distinguished Service Award.

Dr. Ferrell was married January 28, 1909, to Lucile Devereaux Withers, daughter of Benjamin F. Withers of Charlotte. They had one daughter, Bettie Devereaux, and two sons, John Atkinson, Jr. and Benjamin Withers (deceased).

In tribute to Dr. Ferrell, Dr. J. W. R. Norton, State Health Director, said, "He was one of the outstanding physicians of all time native to North Carolina. His work here in early public health in the control of hookworm and typhoid set an example for the control of many other communicable diseases. His international service with the Rockefeller Foundation and his service with the John and Mary R. Markle Foundation made him uniquely qualified to direct the N. C. Medical Care Commission. In that responsibility he set a pattern for the ideal use of Hill-Burton funds in the development of the best hospital planning and health center construction to be found anywhere in the nation."

Lucius Newton Glenn, M.D.
1873-1964

It becomes our sad duty to record the passing of the "Dean of the Medical Profession" in Gaston County—Dr. Lucius Newton Glenn. He had been an active member of the profession in the county of his birth for over 67 years. Only in the last few months of life had he not entered fully into the duties of physician and surgeon.

It is said: "The young may die, the old must die, and the wisest knoweth not how soon. There are none that escape the inexorable doom." Gloomy, shocking words to some, perhaps, but to men like Dr. Glenn, who was a friend of the people, rich in charity, earnest in self-sacrifice, wise words came as an inspiration to spur him on to loftier ideals, nobler deeds, and a more extensive life.

With these thoughts in mind, and the consciousness of their truth and reality within us, though our hearts are heavy at the thought that we have parted from our beloved friend and coworker in this present life, let us remember that there truly is no death, but only a transition; let us glory in the achievements of him who has gone before; let us be reminded that he still lives and speaks through the pages of the blessed book of memory. His virtues linger in our memory and their luster shines brightly from beyond the portals of the grave.

Dr. Glenn was a forward-looking citizen, a valuable and useful member of this community, a member of a large number of medical organizations, and a physician of unusual ability. He was a pioneer in his chosen field of usefulness, and a friend whose loyalty and devotion could not be questioned.

He was born on July 11, 1873, on his father's farm in the Crowder's Creek section of Gaston County, one of the county's pioneer families. His

father was clerk of court for Gaston County during the War Between the States.

From his earliest expressions regarding his future vocation, he showed an overwhelming desire to become a doctor of medicine. With limited finances at his disposal, he entered Catawba College, then located at Newton. As a part-time instructor, and also by doing janitorial work, and with such additions as could be earned during vacation as well as some help from his family, he was able to complete three years of academic work.

Shortly after beginning his fourth year, he learned that the medical colleges were raising their requirements from a three-year to a four-year medical course. Anyone entering medical school in 1894, however, could apply for graduation in or after 1897. Consequently he left Catawber in September, 1894, and entered the Medical School of the University of Maryland, where he graduated with honors in 1897. He received the Dr. Tiffany surgical prize for the highest rating in surgery in a class of over 100, and also the Dr. Neills obstetric prize for the highest grade in obstetrics in the same class. He passed the State Medical Board examination the same year (1897), making the highest grade given by the Board of Examiners that year.

Dr. Glenn, while following the fortunes of Catawba College's football team, from curiosity asked the president of the college how long it would take him to get his diploma from the college he had left so suddenly in 1894. By allowing credit for those courses in medicine that could be applied to an A.B. degree, the president informed him that 90 hours of additional work would entitle him to a diploma. Accordingly, he commuted by train to Salisbury, taking three hours of classroom work a week and returning on the midnight train, until he had earned the necessary credits. At commencement in May, 1932, he was seated with the graduating class and received his bachelor of arts degree.

The year of his graduation from medical school (1897) he began the general practice of medicine in McAdenville and remained there seven years. After serving considerable time in the New York Poly Clinic under the tutelage of Dr. Dowborn, he located in Gastonia, and began the practice of surgery. With Drs. McAnders, J. M. Sloan and H. M. Eddleman, and Mr. Frost Torrance, founder and owner of the old Torrence Drug Company, Dr. Glenn rented an old boarding house on West Airline, Gastonia and organized the Old City Hospital. This building had only nine beds available for patients. At this time there were no registered nurses in the county and no other hospital beds. Therefore he was a pioneer, not only in making the first effort to provide hospital care for patients, but in becoming the first surgeon in the county.

In two or three years the corporation, which had several other stockholders, rented two floors in the present Realty building on West Main Street, which provided about 25 beds. While the hospital was housed in this building, Dr. Glenn purchased the first x-ray machine ever to be used in Gaston County.

The completion of the City Hospital on North Highland Street in 1923 gave Gastonia a modern hospital of more than 70 beds. Therefore the pioneering and determined spirit of Dr. Glenn laid the foundation on which Gaston County was erected, and he was planning to go still further in providing hospital and medical care for this community.

"Behold, how great a flame a small fire kindleth."

In other fields of usefulness, Dr. Glenn has been signally honored. In 1920 he was elected a member of the State Board of Medical Examiners (the eleventh) by the Medical Society of North Carolina. He served on this board as examiner in surgery for a six years, and became its chairman. He was also a past president of the Gaston County and the Seventh District medical societies, and was a member of the Southern and Tri-State medical societies.

He was a past president and life member of the Gastonia Rotary Club and was an ardent supporter of this organization for years. He was a fellow and life member of the American College of Surgeons.

For three years he was a member of the board of directors of the State Hospital at Morganton, and for several additional years was a member of the visiting and consulting staff of this institution.

In World War II he was awarded a Medal of Honor by President Franklin D. Roosevelt for work done for Selective Service. This award was repeated by President Truman.

He served a number of years as Gaston County physician, laying the foundation for our present effective Public Health Department. For ten years he was a member of the Gastonia school board and was largely instrumental in completing a building program which included the present Ashley High School building.

For a number of years he was chief surgeon for the Southern Railway, the C & NW Railway, the Duke Power Company, the P&N Railway, the Southern Bell Telephone Company, and other large institutions in this area.

He was a member of South Fork Lodge No. 462 A. F. & A. M., having been a member when he was located in McAdenville. He was a member of Gastonia Chapter, No. 66, Royal Arch Masons, Gastonia Council No. 15 R. & S. Masters, Gastonia Commandery No. 28, Knights Templar and of Oasis Temple, A.S.O.N.M.S. in Charlotte.

He was a member of Hilton Head Agricultural Society and of Olney Presbyterian Church, to which he contributed liberally.

He had indeed lived a busy and useful life. When all has been said and all attributes considered, his greatest asset to those who knew him well was, "He was a friend."

And now,

WHEREAS, Dr. Lucius Newton Glenn was a member of the Gaston County Medical Society, and more especially a pioneer in its development, and

WHEREAS, On Sunday, November 29, 1964, Dr. Glenn was called by the Great Physician to make his final report, and

WHEREAS, His usefulness and advice to this Society and to its members was always considered valuable, and

WHEREAS, He was held in love and esteem by the large number of physicians in North Carolina who knew him, therefore be it

Resolved, That we bow in obedience to the will of Him that doeth all things well; and

That this Medical Society in monthly meeting assembled observe with sorrow his absence from this group; and

That we will continue to pledge our lives, our fields of usefulness and our sacred honor to the ultimate triumph of the objectives of organized medicine in which he so honorably believed; and

That a copy of these resolutions be spread upon the minutes of this Society, a copy sent to the family, and a copy made available for publication.

Loyal citizen, consecrated physician, energetic and true friend—**Hail and farewell.**

Necropsy Committee
Gaston County Medical Society

Daniel Frank Milam, M.D.

Dr. D. Frank Milam, Chief of the Cancer, Heart and Chronic Disease Sections of the State Board of Health, died at his home in Chapel Hill, on April 6, after a brief illness.

Dr. Milam was born May 12, 1894, in Leesburg, Fla. He received his A.B. degree from Vanderbilt University. He attended the Medical School of the University of Chicago and received the M.D. degree in 1923. He received the Master of Public Health from Johns Hopkins University.

For 25 years, beginning in 1924, Dr. Milam was a staff member of the Rockefeller Foundation with service in seven foreign nations and several states in the South, including North Carolina. For two years he was National Director of the Planned Parenthood Federation and then became Medical Director of the New York Heart Association, serving from 1950 to 1959 in this capacity.

Dr. Milam came to the North Carolina State Board of Health in 1959 as Chief of the Cancer, Heart and Chronic Disease Sections. During his administration of these responsibilities, the areas progressed in an outstanding way in this state, matching progress in any other state in the nation.

He was author of a score of articles in medical journals over the years of his service in public health. He was a fellow of the American Medical Association, of the American Public Health Association and of the New York Academy of Medicine. He was licensed to practice medicine in Illinois, Florida, New York, and North Carolina.

Dr. Milam married Mary Louise Wilson in 1924. They have four children, a daughter, Mrs. R. P. Creed, New York, N.Y.; and three sons, Dr. John H. Milam, Winchester, Va.; Dr. D. F. Milam, Jr., Bellevue, Washington; and Dr. R. W. Milam, McAllen, Texas. Dr. Milam is also survived by two brothers, George W. and E. B. Milam, both of Jacksonville, Fla.

Kenneth Lee Cloninger, M.D.

WHEREAS, Kenneth Lee Cloninger was born in the County of Buncombe of the State of North Carolina on October 31, 1905, and received his education in the public schools and colleges of North Carolina, and ultimately received the degree of Doctor of Medicine at the University of Maryland in 1931, and was licensed to practice medicine in the State of North Carolina in the year 1931, and

WHEREAS, Kenneth Lee Cloninger, M.D., entered into the private practice of medicine in the town of Conover, North Carolina, as a general practitioner and became a member of the Catawba County Medical Society and the Medical Society of the State of North Carolina in 1933, and upon his return from the Armed Services of his country during World War II, did engage in a program of postgraduate education to fit himself for the specialty of Otorhinolaryngology, then did return to Catawba County and engage in the practice of this field of medicine henceforth, and subsequently was received into the Fellowship of the American College of Surgeons in 1953, and

WHEREAS, Kenneth Lee Cloninger was one of the founders of the former Catawba General Hospital, now the Catawba Hospital, and remained upon the active staff of such until his death, and

WHEREAS, Kenneth Lee Cloninger was a genial man of blithe spirit who knew not a stranger, an able practitioner of the art and science of medicine, who also found time in a busy life to participate wholeheartedly in the civic and church affairs of his community, and who was known to the myriad of his friends and patients as "Doctor Ken", and

WHEREAS, The spark of life passed from the body of our friend and fellow physician with a blessed suddenness, as he would have desired his leavetaking to be when such came, as it must to all of us, on January 20, 1965, during an automobile accident; therefore, be it

Resolved, That it is the sense of the Catawba

County Medical Society that its membership recognizes the benefit of having had Kenneth Lee Cloninger among us, and that we take this formal means of expressing our sincere regrets because of his death and that he will not be able to continue to be with us in our community as we work together for the alleviation of the pain, suffering, and the illness of our fellowman, and toward the eradication of disease upon this earth, and be it

Resolved, That the original of this Resolution shall be entered in the Minutes Book of this Society, and be it further

Resolved, That a copy of this Resolution be sent to the family of the late Kenneth Lee Cloninger, M.D., that a copy be sent to the Medical Society of the State of North Carolina, to the North Carolina Medical Journal, and to the American Academy of Ophthalmology and Otolaryngology.

Resolution adopted this the 12th day of March nineteen hundred sixty-five.

For The Catawba County Medical Society
Dewitt Trivette, M.D., President

Ampicillin, A New Oral Penicillin

The American Medical Association's Council on Drugs has issued a preliminary report on a new oral penicillin, ampicillin.

The drug, described in the March 15 **Journal of the American Medical Association,** was reported to be more effective against certain bacteria than some previous types of penicillin.

Ampicillin is useful in fighting infections of the lower respiratory tract and middle ear caused by Hemophilus influenzae, sometimes suffered by children. It also may be used in treating infections of the urinary tract, although other antibiotics are equally effective, the Council said.

Ampicillin supplements penicillin G, an antibiotic which has wide application. The new drug may be absorbed more readily by the body in some cases. Both drugs are effective against several forms of gram-negative bacteria.

An advantage of oral penicillins, such as ampicillin, is that it can be administered to children by parents, on the advice of a physician.

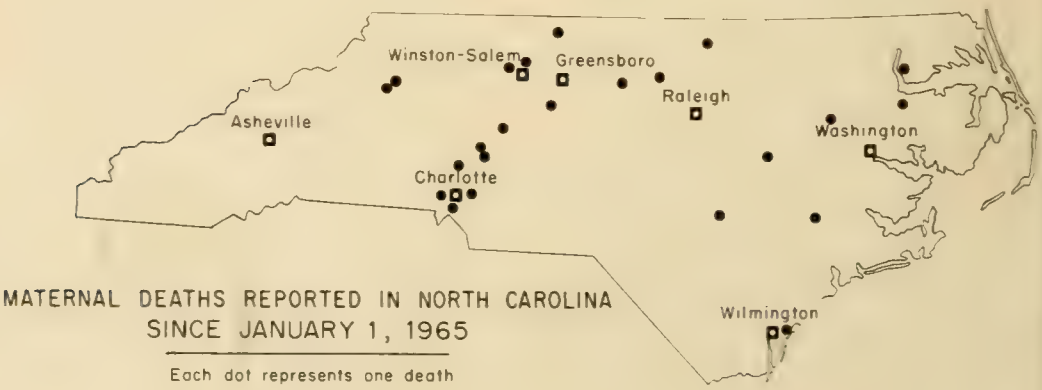
The Council on Drugs catuioned, however, that ampicillin is not a substitute for other widely used antibiotics. Such usage might increase resistant strains of the bacteria it is designed to kill.

The Council's preliminary report is an initial assessment of the new drug, based on available evidence. It does not necessarily represent the final opinion of the Council on Drugs, nor does it imply approval, endorsement, or acceptance of the drug.

Borden Introduces New Low-Fat Cream Cheese

The Borden Foods Company is introducing a low-fat, low-calories product, Borden's Eagle Brand Neufchatel Cheese. The new Eagle Brand Cheese has all the characteristics of cream cheese, but contains 30 per cent less butterfat and 30 per cent more protein.

The new low-fat cheese, following successful test marketing in cities in California, Ohio, and Illinois, is being distributed nationally in an 8-oz. size. Like Borden's Cream Cheese, Eagle Brand Cheese is date-coded and wrapped in an extra heavy foil-paper laminate material that seals in the freshness.



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Each dot represents one death

NORTH CAROLINA
June, 1965
Vol. 26 No. 6

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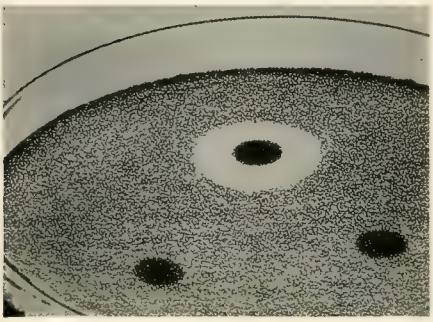
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References: (1) Carroll, G.: Urologists' Letter Club, June 1, 1964. (2) McDonald, D. F., and Short, H. B.: Address to the Fourth Interscience Conference on Antimicrobial Agents and Chemotherapy, New York, Oct. 26-28, 1964.

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NORTH CAROLINA MEDICAL JOURNAL

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VOLUME 26 JUNE, 1965 NUMBER 6

1965: The Role and Responsibility of the Physician

GEORGE W. PASCHAL, M.D.

RALEIGH

The role of the physician of today is not unlike that of our predecessors for the many centuries which have passed since the first records of a rational or scientific medical system was demonstrated by the Greeks about 500 B.C. The writings attributed to Hippocrates were many, but that known as the Hippocratic Oath has probably had a greater influence than any other on our course of conduct.

The Oath of Hippocrates has formed the basis for the code of the individual physician as well as that of organized medicine in the Western World. A temporary exception might have been experienced during Nazi domination of Germany, when some doctors committed unbelievable atrocities which gave to the world what should be sufficient warning of the dangers inherent in State control, when this is unchallenged by basic ethical principle.

Through the years the Principles of Medical Ethics of the AMA have been revised from time to time. These principles are intended to aid physicians individually and collectively in maintaining a high standard of ethical conduct. They are not laws, but standards by which a physician may determine the propriety of his conduct in his relationship with patients, with colleagues, with members of allied professions, and with the public. Through compliance with the spirit and meaning of the Principles, the physician is projected into a role which embodies the purpose of the AMA, and that of the Medical Society of the State of North Carolina.

Presented at the President's Dinner, Medical Society of the State of North Carolina, Charlotte, May 4, 1965.

The purpose spelled out in Article II of the Constitution of the AMA reads: The objectives of the Association are "to promote the science and art of medicine and the betterment of public health." In Article II of our own Constitution it is stated:

> The purposes of this Society shall be to federate and to bring into one compact organization the **entire** medical profession of the State of North Carolina, and to unite with similar organizations to form the AMA with a view to the extension of medical knowledge, and the advancement of medical science; to elevate the standards of medical education and medical service, and to promote friendly intercourse among physicians, and to enlighten and inform the people with regard to the great problems of medical care and public health, so that the profession shall become more honorable within itself, and more useful in the prevention and cure of disease, and in prolonging and adding comfort to life.

Distribution of Medical Care

In accepting these purposes, the individual doctor and Organized Medicine accept a responsibility which has been extensively broadened over the years. There is little to criticize concerning the discharge of medicine's obligations as related to its ethical practice, professional education, scientific advance, and the protection of the public. We do have a responsibility, equally as great, for the *distribution of modern medical care*. There is evidence of our existing failure in this area when we are confronted by the need for physicians in many of our rural communities. Solutions of the doctor shortages in rural North Carolina, and other states, will not come easy; it will require the best thinking of community and area planning, the suport of economists and sociolo-

gists, and above all a calculated participation of organized medicine if success is to be realized.

Studies indicate that certainly it is within the capacity of modern community planning, with thorough professional consultation, to lay out medical service areas and select appropriate centers for medical practice, covering the entire state. Guidelines for the development of each area and center could be so drawn as to provide factors most significant to young medical graduates in their choice of opportunities to practice and raise their families. A doctor, now ready to begin practice, looks back on the many expensive years devoted to preparation for his life's work. Realizing the importance of environment, he naturally desires to locate in an area in which his children will have the oportunities afforded by good schools, libraries, recreation, and contact with the arts. Some individual rural communities have provided adequate office space as an enticement to physicians. For the medical center to become effective, however, a substantial expenditure of local, state and Federal funds would likely be needed. Only a fraction of the expenditures necessary in many areas primarily relate to the practice of medicine and the ever rising costs of health and hospital care. The young doctor will be attracted to the vigorous development of the social and economic health of a rural community. Our ever expanding highway system is bringing the patient closer to the physician as measured in minutes. Community centers could bring every citizen within the State in reasonable range of modern care.

The medical profession alone cannot bring about an adequate distribution of the health services for our people. The solution of the complex problem of providing health services will require a coordinated effort. The most knowledgeable members of the health professions, the ablest men in the field of professional management and business skills, sound progressive community planners, and political leaders of vision must join hands in a common effort.

Regional medical service areas with a functioning medical center would have an opportunity to contribute significantly to the education of medical students in their third and fourth years if the extramural "clinical clerkships" or "clinical scholarships" are made available. This form of training would open new vistas and provide participating students an experience in depth of the extent of health problems and make them aware of the clinical resources available to care for patients. It would provide the stimulant to upgrade rural medical care. At the same time it would demonstrate to the student the pleasures and satisfaction of living in a nonurban community. Through this means, too, the preceptorships of the Academy of General Practice will attract graduates to rural practice. The potential is great. Nothing should be overlooked in our efforts to bring to the people of all areas an adequate distribution of modern medical care.

Doctors and hospital administrators throughout the State know that possibly the greatest shortage problem today involves ancillary medical personnel. We are aware of the impending crises in nursing care. We are hopeful that our diploma schools which have provided the bulk of the actively practicing registered nurses can be supported, upgraded where necessary, expanded, and continued. We are grateful that the Board of Education is undertaking the Associate Degree Program.

The Governor's program in support of elementary and high school education, and the expansion of health-education programs and opportunities in existing and new technical institutes and community colleges, are likely to have the greatest influence upon increasing the numbers of qualified applicants and qualified students for professonal training in nursing and the technologies.

Working in liaison with the Medical Center Study Commission, I was given an insight into some of the complex problems of the State. Where can such problems be studied and a realistic, objective, unbiased answer be obtained? There is no such place. Problems are frequently worked out by a method of trial and error. A unique solution is offered in the proposed establishment of what



George W. Paschal, M.D.

might be called the Institute of Health or the Community Health Planning and Research Service. This has its protoype in the Institute of Government at the University of North Carolina, and The Agricultural Research Division of North Carolina State University.

The Community Health Planning and Research Service would be a teaching, research, and consulting agency to the health services of the State—their administration, finance, and certain closely related fields. It would exist to help health professionals, citizens, and public officials improve health services and administration in local communities throughout the State of North Carolina. It would appropriately be under the enlighted leadership of the University of North Carolina. It would make possible the full utilization of opportunities afforded by the great Public Health Service Environmental Health Center in the Research Triangle, as well as extensive Federal funds expected in the state. A complete commitment by the health professions themselves to this concept of an institute in the field of health would contribute beyond measure to its success.

What We Can Do Now

Even at best several years will be required to plan, organize, and provide the appropriate distribution of modern medical care to our people. While we make no admission that medical care is not avalable to all citizens, we do agree that it can and must be expanded and facilitated for physician and patient alike. Some of the things we can accomplish without delay merit consideration here.

It is certainly well known that there is an inadequate number of practicing psychiatrists in North Carolina and the United States. No doctor is given licensure to practice without first having demonstrated his knowledge in this field. While I do not contend that most physicians qualify as specialists among this group, I do assert that regardless of their primary interest, they have a responsibility to those who might be mentally disturbed. All surgeons, and other specialists, know that many of the patients seen in consultation have symptoms emanating from a serious emotional problem. When the doctor is a sympathetic listener, the patient himself frequently provides the answer to his disturbance and directs the course of management. This does require time. Doctors must, in spite of the pressures of their everyday activity, let the patient talk; for more often than not he will tell what his trouble is.

The great burden falls upon those in general practice and internal medicine. A Georgetown University professor of psychiatry has said that a suicidal patient often "cries for help" to his doctor by complaining of physical symptoms with no basis in reality. When a patient makes such complaints, it is important to look for the emotional problem that is responsible. Ideas of worthlessness and hopelessness can be elicited only in a careful interview, and then appropriate treatment can be given or secured. This may well avert suicidal tendencies or save the patient and state from many expensive and unproductive days. Each owner of the privilege of being a doctor of medicine must assume his responsibility in the overall care for the betterment of mental health among the people we serve.

Disaster Medical Care

And now let us give our attention to the problem of Disaster Medical Care. Planners to cope with this problem direct their attention to both natural disasters and those of thermonuclear warfare. All disaster planning must be predicated on the assumption of survival. This implies survival not only of the individual, but of the Nation. All planning must be based upon consideration of maximum catastrophe in any given disaster, whether man-made or natural. In current planning we have expanded our awareness of the enemy's destructive potential to equal that of our own. Our efforts have been directed toward planning to successfully provide for our population ways and means of survival. The Federal Government, and our State Government, are aware of the need for realistic planning and are doing something about it. There are many facets in the overall problem of Civil Defense. Those of the medical health group have a responsibility second to none of the others.

It is in this area that the individual physician comes into focus. Here he finds himself in a dual role. First, he has the role of individual physician; and, second, he finds himself joined with his fellows in a broad service to the entire population which only Organized Medicine can provide. The entire program of the Committee on Disaster Medical Care is predicated on the concept that Civil Defense is the responsibility of all levels of government and of all citizens and thus anticipates their participation. In order that individuals as well as organizations be brought into the picture, liaison has been established at national, state, county, and local levels. Here in North Carolina our Medical Society has staff representation in the North Carolina Civil Defense Agency, and comprises a Committee of the Health Task Groups—one of fourteen—of our Governor's Committee of Emergency Resource Planning.

We must, in this day of thermonuclear war's destructive potential, acquire a readiness to provide for our community—and our population—the best possible medical care for the greatest number of sick and injured. If our local physicians along with hospital staffs have properly prepared for emergencies with which they are now familiar, they can by virtue of study, planning, training, rehearsing, and testing, become prepared for a disaster of such magnitude as might be induced by a thermonuclear attack. Professional competence is expected of the physician. The people he serves rely upon him for advice. Many physicians have acquired the attitude that if we have an all-out attack with thermonuclear weapons, all planning and preparation would be futile. But survival is possible, even probable, with proper preparedness. The individual doctor has the right to his own opinion, but he has no right to abrogate his responsibility to the people he serves. To serve effectively these people, he has the responsibility to lend his talent toward preparedness, prevention, treatment, and rehabilitation.

A change of policy now provides for the prepositioned 200-bed packaged disaster hospitals to be used in local disasters. There are 50 such hospitals in North Carolina. Every doctor has a responsibility to know the location of the one nearest him, and be aware of its plan for activiation and use. Possibly many of you already have assignments in its plan for utilization.

Doctors must know and be able to direct rescue efforts; they must help train volunteers, and upgrade the efficiency of the transportation of the injured or sick. We should lend our full support to the program of organized ambulance services in the public interest.

Blood Bank Program

The distribution of modern medical care is frequently closely associated with the use of blood or its derivatives. In this area we have the opportunity to make a singular contribution.

An increase of participating members in the North Carolina Association of Blood Banks will do much to bring about a wider distribution of modern medical care. Individual membership is available for those interested in blood banking. Institutional membership is open to any ethical blood bank which engages in (a) donor recruitment, (b) bleeding of donors, (c) processing of whole blood, (d) storage of whole blood, (e) cross-matching, and (f) administration of blood or blood products.

Since 1959 the North Carolina Association of Blood Banks has been in operation. In 1960 the program received the endorsement of the Executive Council. The American Association of Blood Banks is available, on a voluntary basis, to every blood bank wishing accreditation, and yet less than a dozen have asked to be accredited.

The purpose is (1) to expand blood bank facilities to meet the needs for blood and its derivatives of every person in the state, (2) to promote and foster the exchange of ideas, materials, and information relating to blood-banking and transfusion services, and (3) to foster and develop a clearing house or organization for the exchange of blood and or credits within and without this State.

Standards have been set primarily to improve the quality of blood banking. The bank accepting blood must be assured that the blood was drawn under the best possible circumstances, that it was stored under op-

timal conditions, and that it is as good in every repect as blood drawn and processed by the bank receiving the blood. The bank shipping the blood must be assured an equitable remuneration for making the blood available. Through an effective blood exchange program, blood could be made available to a patient in one hospital even though that particular hospital did not at the time have the type of blood in the amount needed.

Broad participation in this blood-banking program will lessen the cost to the patient and greatly improve and facilitate its services. It will add immeasurably to our posture of preparedness to cope with our everyday problems as well as adding a strong element of readiness for Health Resources in case of natural or man-made disasters. Our Society has the responsibility for action now at all levels.

Medical Examiner System

A final word is directed here to the distribution of proper care for the dead. All of us are familiar with the coroner system as it operates throughout most of our State. A few of our counties have adopted a Medical Examiner System. The support of this Society in creating a state-wide Medical Examiner System is unquestionably merited. We should seek the support of the county commissioners, and the General Assembly, in making this a reality. A central office, properly equipped and staffed, under the directorship of one eminently qualified in the field of forensic medicine would form the hub around which counties and districts, with their own staffs, could efficiently function. Duplication of effort and expense could be avoided. A central toxicology laboratory could be incorporated in the over-all planning. Close liaison with our medical schools and law-enforcement agencies, could be maintained. Standards could be spelled out. Costs, in the end, would be reduced. The system offers a potential of service much needed in our State.

Doctors should have a public interest for their private Society. Will you not help make the most of it?

Dysfunctional Bleeding in the Adolescent Evaluation and Management

John H. Monroe, M.D.
Winston-Salem

The term *adolescence* is derived from the Latin verb *adolescere*, meaning to grow up, and is defined as the span of life between puberty and maturity. Puberty is the age at which reproduction becomes possible and is characterized by maturation of the genitalia. Full maturity is assumed to have occurred when physiologic somatic growth is complete. The age of this maturation varies from 16 to 20 years.

In medical terminology, the misuse of the word *functional* is widespread. Functional merely means affecting function and not structure. *Dysfunctional* implies partial disturbance or impairment of the function of an organ, and is applicable to the present subject of "adolescent bleeding of nonorganic origin." The relationship between dysfunctional bleeding and anovulation was stated in our present-day context in 1930 by Graves[1].

Incidence

If we consider gynecologic year 1 as the menarche, then irregular ovulation and resulting dysfunctional flow will occur in more than 50% of all females, and in gyne-

Read before the Section on Obstetrics and Gynecology, Medical Society of the State of North Carolina, Charlotte, May 3, 1965.

cologic year 12 less than 3% will have anovulatory cycles. The average number of menstrual cycles before regularity of the pituitary-ovarian axis is established is about 30, and the median range is 12 to 60 cycles[2]. Many authors consider that irregular ovulation and menstruation are so normal in the adolescent that their tabulations of dysfunctional bleeding in this age group may be as low as 5% (Novak). Dysfunctional bleeding is considered pathologic if it causes blood loss and anemia, or persists more than seven days[4]. Other symptoms may be of acute concern to the patient but fall outside these limits.

The adolescent years are of extreme importance for our consideration, because more than 54% of first marriages and more than half of first pregnancies occur before the age of 20[3]. Some pediatricians in this country and several British medical writers have advised the use of the term *ephebiatrics* to apply to adolescent medicine. This is derived from the Latin *ephebus,* meaning a young man.

About 20% of all private patients in gynecologic practice are adolescents. Half of such patients are brought to the physician by a parent, usually the mother[3]. Some are young brides, some are already mothers, some seek premarital advice. Accessory symptoms always involve tension and often include vasomotor phenomena, which are more frequently ascribed to the menopausal years. Insomnia, skin problems such as acne and oily scalp, questions about rate of growth, degree of physical development, and breast size and asymmetry are commonly of greater personal concern to the patient than the presenting immediate complaint of abnormal bleeding[5-7, 12].

Evaluation

Understanding the adolescent patient is of grave importance, as Easley has pointed out. This patient is in a physiologic period of tumultuous growth. She has a tremendous self-concern, a great capacity for change, a dislike of being different, and an exaggerated fear of malfunction or improper development of her body. She is often a food faddist, and fears obesity.

History

Obtaining a significant history is all-important in weighing factors which may be influencing her bleeding. We need not attempt to be a pal, but we should try to be comfortable with this girl, see her alone, listen to her story, and give her our undivided attention[7-9]. Teenagers are prudes for honesty and forthrightness. If we show a hurried distinterest in her minor problems, we lose one of our most valuable tools in obtaining a history that will be of diagnostic value, and we destroy the effectiveness of our reassurance which so often proves to be the most logical and effective treatment of adolescent dysfunctional bleeding[10, 11, 13].

Some doctors prefer meeting the patient first at the examining table, while others find it more comfortable to obtain a detailed history first. The routine must be varied according to the doctor's personal preference as influenced by the individual patient. The presence of the mother at the examination is generally undesirable. More intimate points of history may be obtained by questions during the examination, which seem to relax the patient and bring out more complete spontaneous answers[3, 8, 9].

In addition to routine medical history, points of endocrine significance to include are the onset of breast development and the growth of axillary and pubic hair. These usually precede menarche by 12 to 24 months. The speed of total body growth in the years from age ten to date of examination is important. Questions about the age of menarche or breast development of mother, sisters, aunts, and cousins who are known well by the patient may elicit information regarding a familial pattern of maturation, and always add to our understanding of the patient's concern about her differences, likenesses, fears, and her general attitude toward her female function[6, 17].

Physical examination

A full general physical examination including pelvic evaluation by rectal, and preferably by vaginal, check is obligatory. I cannot agree with treating even mild dysfunctional bleeding without examining the

patient. Reassurance alone in respone to a mother's questions about her daughter's irregular bleeding is negligent practice which gives false confidence to the mother and no therapy to the patient involved.

Routine examination should especially include findings of hormonal influence. Body contour; distribution, quality, and amount of body hair; trunk-limb ratio; degree of breast glandular, nipple, and areolar development; and of course, evaluation of genital formation and maturation are all of major significance[5, 13, 15].

Explanation and reassurance by the physician and the nurse almost always allow satisfactory, gentle pelvic examination. A surprising number of patients will relax well for this examination if it is preceded by the comment that a patient's ability to allow vaginal examination does not indicate sexual promiscuity or non-virginity. The use of the virginal speculum is rarely helpful. I have found this instrument more suitably adapted to the shortened atrophic vagina of the senile patient. In adolescents a narrow Pedersen speculum is usually ideal. In the presence of a very tight hymenal ring, adequate vaginal, mucosal, and cervical examination to include obtaining Papanicolaou spreads can be accomplished with a nasal turbinate speculum or a fenestrated rectal speculum. Some gynecologists recommend the use of an endoscope[10]. I have not found this helpful because a better evaluation is possible with the Pedersen or nasal turbinate speculum when any examination is possible. Cervical consistency, uterine size, cervix-to-fundus ratio, adnexal and cul-de-sac evaluations can be made with one-finger vaginal palpation in conjunction with abdominal pressure by the other hand. The valuable rectovaginal examination is rarely impossible, with encouragement of the patient, gentleness, and generous lubrication. The simple expedient of asking the patient to press against the examining finger as if having a stool when we pass the anal sphincter will minimize discomfort and add to the accuracy of palpation.

Laboratory studies

Routine blood counts and urinalysis should be extended to include bleeding time, clotting time, clot retraction efficiency, and Rumpl-Leeds test for petechiae. The latter test, done with a blood pressure cuff, most often reveals bleeding defects, because capillary fragility is at fault in excessive vaginal bleeding second only to the anemias when blood dyscrasias truly account for the problem[17, 19].

Hormone evaluation is invariably noted as an essential to adequate investigation of any uterine bleeding problem. In actual practice, however, hormone assays are rarely indicated and are rarely of real help in the diagnosis of dyfunctional bleeding[20]. A gross measure of estrogen level is found in the index of cornification of vaginal mucosal cells, obtained by placing a vaginal smear over a Petri dish of Gram's iodine for five minutes. The mucosal cells will be stained enough for one to estimate percentage of cornification. When completing the request for the Papanicolaou smear, we may ask the cytologist to estimate the estrogen effect[4]. The presence of active estrogen is important in deciding initial therapy, and at least one of these simple tests is helpful. Follicle-stimulating hormone determinations measure total, not just pituitary gonadrotropins. They are expensive, they vary from one laboratory to another, and preservation or refrigeration for transport of test material is often unsatisfactory. Also, single determinations are not dependable guides to diagnosis or therapy[20]. All these problems exist in measuring estrogenic substances in urine and in blood serum.

Our state needs a more extensive and complete endocrine clinic and laboratory. Cyclic and dysfunctional estrogen variations, for example, must be measured in micrograms on several samples. Two of our medical schools are able to measure a few samples in milligrams during complicated pregnancies only.

Protein-bound iodine and cholesterol determinations are accurate and available to us all. These should be obtained to assure a euthyroid status. The 17-ketosteroids and 17-hydroxysteroids may be obtained in many laboratories. Their greatest usefulness lies in diagnosing the degree of malfunction such as in Cushing's syndrome, and in following the progress of cortisone treatment

of definite adrenal malfunctions. The chromatograph breakdown of ratios of the androgenic steroids is rarely available, requires repeated determinations, and is inconsistent in the best of hands when applied in the Stein-Leventhal syndrome, which is the most frequent problem occurring in adolescent dysfunctional bleeding due to endogenous androgenic end-products. Routine spreads for Papanicolaou stain are important from the standpoint of ruling out carcinoma, as well as in estimating estrogen effect. Roentgen studies can be beneficial in the occasional case when growth problems accompany the bleeding. Sella tursica films and long-bone evaluation for epiphyseal fusion are sometimes indicated.

At this point in our patient's evaluation we should be able to correlate thoughts about the level of maturation in regard to physical maturity, bone age, nutritional status, family background, and emotional composure. In dysfunctional bleeding in general we need to rule out organic abnormalities. This should be possible by the above recommendations.

Classification

In the absence of structural abnormalities we must classify our case of dysfunctional bleeding as increased, descreased, irregular, or painful[14]. Combinations of these categories will exist. The terms metropathia, menorrhagia, metrorrhagia, polymenorrhea, and oligomenorrhea should be avoided because of their ambiguity[20]. The degree of debility caused by the dysfunction is all-important in choosing a proper course of management. Massive bleeding generally requires hospitalization. Persistent or recurrent bleeding requires more active therapy than does occasional irregular spotting.

Management

Once we are convinced that the amount of bleeding lies within the range of normal variation, our first and foremost duty is to offer reassurance; our rapport with the patient and with her mother will govern the degree to which it is accepted[8, 9]. Instruction regarding the normal general physical changes and specific genital changes and functions during this period is of great importance. Diagrams and models are helpful. Printed matter is more acceptable if individually reviewed with the patient. Dr. John Parks has helpfully pointed out the value of the use of mirrors in instructing adolescent and premarital patients[3]. Directing the patient in the palpation of the vaginal vaults and the cervix is frequently a logical source of intelligent understanding.

If symptomatic blood loss has occurred, anemia has developed, or minimal flow has persisted, then active treatment must be instituted. The value of histologic examination of endometrial tissue as a guide to diagnosis and therapy is very great. Endometrial biopsy can be performed in the married adolescent after mild sedation, but this procedure cannot be done routinely with any degree of ease in this age group. The risk of undiagnosed cancer and the danger of fatal bleeding in the adolescent are far less than the hazard of anesthesia for dilatation and curettage. Also, the relief afforded by dilatation and curettage is often short-lived[4, 19, 21]. Almost all adolescent vaginal bleeding is on the basis of anovulatory cycles. I agree with Dr. Greenblatt and others that the vast majority of cases will respond to hormonal therapy[17-19, 24].

Massive bleeding requires hospitalization and routine laboratory studies, with transfusion to correct hemoglobin levels below 8 gm/100 ml. Premarin given intravenously in 20 mg doses every three hours until bleeding is controlled requires the addition of progesterone, such as 50 mg given twice a day[19-21]. Hydroxyprogesterone (Delalutin) is available in the highest milligram concentration per dose of any intramuscular preparation, and I prefer 250 mg daily for three days, then twice weekly for two weeks. All the writers on this subject have their preferences for treatment. The major points of agreement are:

1. Large intravenous doses of estrogen and intramuscular doses of progesterone in the first two to three days of treatment gives best results with massive bleeding.

2. Prolonged cyclic support for two to four cycles reduces the rate of recurrence.

3. Dilatation and curettage is rarely indicated, but should be utilized if heavy

bleeding persists after 24 to 48 hours of active hormone therapy.

4. Cyclic hormonal therapy in stubborn cases may be continued for more than two years to avoid repeated dilatation and curettage. Most often, progesterone given orally or intramuscularly every four to five weeks suffices unless estrogen deficiency has been demonstrated[18, 19, 21].

Persistent irregular minimal bleeding frequently responds to three cycles of combined oral therapy. Premarin 1.25 mg daily for 20 days and Norlutate 5 mg daily for 5 days is a good cyclic course. These two particular drugs have produced less nausea and less distention in my adolescent patients than have other oral progesterones or the economical diethylstilbestrol.

Relapses are frequent. Scanty and infrequent flow accompanied by irritability, family complaints, and absences from school can be treated with gratifying results by giving Norlutate, 5 or 10 mg daily, for the first five days of each month on an indefinite basis. This dosage may be adjusted according to clinical response. Dr. Aydar of the University of Georgia has good results with Ethisterone, 30 mg daily for five days, on a monthly basis[19].

Placebo may be used in controlling dysmenorrhea; but in general I feel that failure of reassurance and adequate instruction constitutes a good indication for bona fide cyclic therapy.

The ovary-stimulating drugs are more in the news just now, especially in managing fertility problems[25]. These schedules are interesting to mention but actually have no place in treating the adolescent girl, whether married or single.

Mer-25, Clomiphen, and MRL-41 will effectively produce ovulation, but large cystic ovaries frequently result and febrile responses mimicking acute pelvic inflammatory disease occur[22, 23]. Human gonadotropin may produce antihormones, and has been found occasionally to cause anti-A and anti-B responses and create erythroblastosis difficulties[21]. Administration of Perganol (human gonadotropin from postmenopausal urine) has been followed by quadruplet pregnancies[26]. Human pituitary gonadotropin is too expensive for prolonged therapy, but it is occasionally justified in an attempt to trigger ovulation and promote pregnancy in the patient beyond the teen years with sterility associated with anovulation[25].

X-ray therapy may be mentioned just to condemn it. Pituitary and ovarian irradiation are no longer recommended, just as irradiation for conditions other than malignancy is rarely indicated.

Surgery has no place in the treatment of most cases of dysfunctional bleeding[19, 20].

Some excellent gynecologists have said that dilatation and curettage should never be done in patients under 35 years of age who have dysfunctional bleeding. The occasional endometrium which resists hormonal therapy does require removal of the source of bleeding while supportive measures are being established for future relief[18]. When recurrent bleeding cannot be controlled medically, organic disease may have to be ruled out, with the patient under anesthesia, by examination, dilatation and curettage, or both. In managing the adolescent dysfunctional bleeder, our goal must be to preserve the child-bearing function unless the patient's life is in danger; therefore, hysterectomy cannot be justified in the absence of organic disease[18-20].

Follow-up

Patients who have had dysfunctional bleeding problems in adolescence have a significantly higher incidence of obstetric and gynecologic complaints in later reproductive years[16]. For this reason continued follow-up is necessary for good care beyond the teenage problem. The importance of routine regular pelvic checkups, with review of menstrual performance and hemoglobin determination, should always be impressed on the patient.

Summary

1. Dysfunctional bleeding in adolescence is second only to this problem in the menopausal years.

2. Organic disease must always be ruled out.

3. Hormonal studies are rarely indicated, if a thorough history and physical evaluation are carried out.

4. Reassurance, instruction, and general supportive measures are the most beneficial forms of therapy.

5. Response to hormonal therapy is generally dramatic and successful.

6. Surgery is seldom necessary and should be reserved for emergency and temporary relief.

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Drug Advertising or Government Formulary?

Almost 600 new basic chemical and biological drugs were developed in the last 30 years. In spite of plant expansion, labor costs and research expenses, pharmaceutical prices have gone down 13.8% since 1949 compared to a rise of 26.7% in the Wholesale Price Index of the Bureau of Labor Statistics. Being acutely aware of the attacks on the American pharmaceutical industry by our national government and its committees, it is interesting to note that if all drug advertising were eliminated, it would amount to a saving of some 5 cents on a dollar for a prescription item. This is one of the major things the Kefauver committee was trying to do. How the medical profession would be affected by such a restriction is hard to envisage and what it would do to the drug industry might well be catastrophic, unless, of course, the doctors were required to prescribe only from a government formulary as was tried by the government of Australia in 1949.—W. Albert Brewer, M.D., in *Arizona Medicine* 22: 2, (Feb) 1965.

The Prognosis of Asthma in Children

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Asthma is a common disease in children. Many of them recover during childhood or adolescence; some continue to have mild or severe asthma as adults. There is little information to indicate how many asthmatic children get well. There is even less that will help the physician in deciding which child is most likely to become a healthy adult. We have reviewed significant data from the records of 115 children seen in the University of Virginia Allergy Clinic over the past 30 years, and the records of 200 adults aged 50 or older, as well as records from other sources, in an effort to provide some of this information.

Review of the Literature

Several reports indicate that the immediate prognosis for infants and small children is good. Buffum[1] studied 87 children first seen with asthma before the age of 2 years. On follow-up examination, at an average age of 9 years, 55% had not wheezed for a year. Of those whose asthma was associated with atopic dermatitis and a positive skin test reaction to egg (19 patients), only 15% had wheezed for a year. Of the 30 patients who had not had atopic dermatitis and who had had negative reactions at the first skin-testing, 70% had not wheezed for a year. Selander[2] found that 80% of 515 children who had asthma in infancy were free of symptoms when seen between the ages of 6 and 11. Frazier[3] studied 58 asthmatic children whose symptoms began before the age of 6 years; 53 of them had markedly improved after three years of allergy management.

Reports indicate that the immediate prognosis for older children is not quite as favorable. Bullen[4] treated 235 children whose asthma began before the age of 15. His treatment consisted of avoidance of the foods and inhalants that resulted in positive reactions to scratch tests, injections of extracts made from the allergenic inhalants, injections of bacterial vaccines, and the use of symptomatic remedies. Antibiotics and steroids were not used. After one to five years the results of treatment were satisfactory in 68%, improved in 13%, and unimproved in 19%. The results were better when the skin test reactions were positive than when they were negative. Dees[5] observed 233 children after two years of treatment with desentization, avoidance of allergens, and dietary restriction. Forty-four per cent were essentially free of asthma, 36% were improved but having moderate difficulty, and 20% were unimproved. These children were probably treated before the antibiotic and steroid era, but the report does not make this clear. The author does not relate the results to the presence of allergy or infection. Engström and Kraepelien[6] observed 110 asthmatic children aged 1 to 15 who were found to be sensitive to allergenic inhalants by protection tests. Two to four years after beginning specific desensitization, 84% were improved (71% markedly so). The duration of the asthma had no effect on the results. Results were poorer in the children who had more severe asthma at the beginning of the study.

Reports on asthma in children may not give convincing evidence that treatment influences the course of the disease. The report by Engström and Kraepelien[6] and a report by Johnstone and Crump[7] are exceptions. Johnstone and Crump[7] studied 173

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children for four years while they were receiving injections. Group I was treated with saline; group II, with a 1:10,000,000 dilution of appropriate antigen; group III, with a 1:5,000 dilution of appropriate antigen; and group IV, with a maximum tolerated dose of antigen. At the end of four years the children in groups III and IV were much improved. In both the third and fourth groups, those with more severe asthma at the beginning seemed better at the end of the study.

Three reports give later follow-up studies on asthmatic children. Rackemann and Edwards[8] reported on 449 asthmatic children who were first seen before the age of 13. Twenty years later it was found that 71% had become free of asthma by adult age 15. Only 11% continued to have severe asthma. Four had died of asthma. There were 370 with positive reactions to skin tests; 70% of them were free of astma. Of 79 children having negative reactions to skin tests, 78% were cured.

Ryssing[9] reported on the course of asthma in children. Of his group of 198 patients, only a few received any sort of injections. Eighteen to 31 years after their first stay in the hospital, 10 (3.4%) had died of asthma, 165 (55%) still had asthma, and 106 (35.6%) were free of symptoms. It is of interest that of the latter, 22 were short of breath, and 135 of those with persistent asthma managed full working hours. Only 30% of the entire series had become symptom-free without desensitization.

Ogilvie[10] reported on 1,000 unselected patients with asthma followed for an average period of 11 years. The prognosis was more favorable in the 624 whose age of onset was less than 16 years. Sixty per cent of the younger group were in good health at the time of follow-up; 23% were in fair health; 14% were in poor health; and 3% were dead of asthma or related disease. Intermittent asthma was associated with a better prognosis. The presence of chronic bronchitis was a serious complication, suggesting a poor prognosis in the entire group. However, many of the children became free of their recurrent or chronc bronchitis and were in the good health group at the time of follow-up. Thirty-five per cent gave a clear history of aggravation of symptoms after contact with an allergen or had a strongly positive skin test reaction, and were considered to have allergic sensitivity. They fared some better than the others, but the difference was marginal. Treatment by desensitization had no effect on the long-term prognosis, although usually the immediate result was beneficial.

Table 1
Age of Onset of Asthma in 115 Children

No. of Patients	Age of Onset (Years)
13	0-1
13	1
25	2
15	3
11	4
11	5
10	6
2	7
2	8
3	9
2	10
2	11
4	12
1	13
	14
1	15

Method

The records of a large number of asthmatic children were selected from the files of the University of Virginia Allergy Clinic. For the preliminary selection, any child who had had one or more visits to the clinic for asthma at the age of 15 or less was included. Each had a comprehensive study including a detailed history, physical examination, appropriate skin tests, laboratory studies, and x-rays. An attempt was made to obtain information on each of them by a questionnaire sent to the patient, the family, or the local physician, or given during a visit to the clinic. Adequate reports were obtained on 115 patients. A total of 155 letters were sent. Tables 1 and 2 show age of onset and duration of follow-up.

We have included in this study any child who had recurrent episodes of wheezy dyspnea. The episodes may have been due to atopic allergy, respiratory tract infections, emotional upsets, or other unknown cause. Children with an occasional episode of acute bronchitis and wheezing are not included.

Table 2
Duration of Follow-up in 115 Children

No. of Patients	Years of Follow-up
	0-3
4	3-6
9	6-9
14	9-12
25	12-15
24	15-18
19	18-21
7	21-24
6	24-27
5	27-30
1	30-33
1	33-36

The children were seen over a period of more than 30 years. Some were seen once or for a brief period. They were treated in various ways. For these reasons we have been unable to evaluate the relationship of any treatment to the progress of their disease.

On the questionnaire each patient was asked to evaluate his present state of health. He was also asked about absences from work or school, the use of steroids, and the number of respiratory infections in the past year. Information obtained about the number of allergy injections was not satisfactory for tabulation.

From all the information available the state of each patient's health was classified in one of the following categories:

A. *Well*: Essentially well and taking no, or very little, medicine.
B. *Mild asthma*: An occasional annoying attack.
C. *Severe asthma*: Frequent annoying attacks.
D. *Chronic asthma*: Asthma on most days.
E. *Dead.*

Results

At the tme of follow-up study more than 75% of the children were well or in relatively good health (groups A and B, Table 3). From informaton obtained at the time of the original examination or developed during the course of the disease, the children were classified as allergic or non-allergic. The allergic children all had a history of exacerbations from important inhalant allergens, plus positive skin test reactions (Table 4).

Table 3
Health Status at Time of Follow-up Study

Group	No.	Percent
Well	61	53
Mild asthma	29	25
Severe asthma	20	17
Chronic asthma	4	2.4
Dead	1	.8
TOTAL	115	99.2

Eighty-eight per cent of the allergic children had mild or no asthma, while only 50% of the non-allergic children were as well when they submitted their report as originally (Table 4).

Frequent respiratory infections seemed to be associated with persistent asthma. The patients were divided into two groups: those having frequent infections and those with infrequent infections. The children who had five or more colds associated with fever, yellow nasal secretions or yellow sputum during the year before the follow-up study were put into the "frequent infections" group, and the others into the "infrequent infections" group. Nearly all of the patients with infrequent infections, but only a third of those with frequent infections were in group A or B (Table 5).

Twelve of the entire group had taken some form of steroid during the year before the follow-up study. Only two had taken as many as 100 tablets. None of these individuals were included in the patients classified as "well" and only one was in the "mild asthma" group.

Asthma in Adults

Another group of patients was studied. The records of 200 asthmatic patients who were aged 50 or older at the time of the study were reviewed. Only 21 of these had developed symptoms before age 16. This information suggests that the disease had been acquired in adult life and did not represent an extension of childhood asthma.

Discussion and Conclusions

Our observations suggest that the physician can give a more accurate prognosis to the parents of an asthmatic child if he has information about the presence of allergy and the frequency of respiratory infections. Of 115 asthmatic children reporting, 90 were

Table 4
Health Status of Allergic and Non-Allergic Children at Time of Follow-up Study

Group	Allergic		Non-Allergic	
	No.	Per cent	No.	Per cent
Well	52	62	9	28
Mild asthma	22	26	7	22
Severe asthma	7	8	13	40
Chronic asthma	1	1	3	9
Dead	1	1		
TOTAL	83	98	32	99

free of severe asthma, the majority after nine or more years from the time of their first visit. When the allergic are separated from the non-allergic children, we find that 88% of the 83 allergic children and 50% of the 32 non-allergic children were free of severe asthma.

Frequent respiratory infections are associated with a poor prognosis in asthma. Of the 36 patients who had had five or more infections during the year before reporting, only 33% were in relatively good health. There were 79 individuals who did not have frequent infections, and 98% of them were free of severe asthma. Our information will not permit one to say that frequent infections cause severe asthma. An equally valid concluson could be that persistent asthma causes frequent respiratory tract infections.

A number of observations recorded in the literature suggest that the outlook for allergic children is usually not bad; however, there are numerous inconsistencies. Selander[2] found the prognosis to be excellent when asthma developed in infancy. Buffum[1] noted poor results when the children had atopic eczema or a positive skin test reaction to egg. Bullen[4] and Engström and Kraepelien[6] noted good results in atopic children. Rachemann and Edwards[8] and Ogilvie[10] reported on large groups of children, most of whom showed improvement. In neither series was there a great difference between the allergic and non-allergic. Only 35% of them became free of asthma, but most of those who were

Table 5
The State of Health of 115 Asthmatic Children at Time of Follow-up Study. Frequently Infected and Infrequently Infected Groups.

	Infrequent Infections (Less than 5 colds a year)		Frequent Infections (5 or more colds a year)	
	No.	Per cent	No.	Per cent
Well	57	72	4	11
Mild asthma	21	26	8	22
Severe asthma	1	1	19	52
Chronic asthma			4	11
Dead			1	2
TOTAL	79	99	36	98

still living were able to work. Three per cent died of asthma.

Our review indicates, first, that in general the outlook for asthmatic children is quite good. It is better when there is evidence of allergy and apparently worse when the asthma is associated with frequent respiratory infections. Second, the asthma found in older patients is usually not an extension of childhood asthma, which only occasionally proves fatal.

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Ophidism: The Snake Bite

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Winston-Salem

Although poisonous snake bite is not now a major problem in the United States, when it does occur it entails considerable morbidity and even some mortality. At the same time, little is written or said about the condition or its treatment. The purpose of this paper is to present a concise and up-to-date review of the subject.

Only four species of poisonous or venomous snakes are native to this country. Rattlesnakes (*Crotalidae*) and moccasins (*Akistrodon*) belong to the group of pit vipers, so called because of a small pit between the eye and the nostril. This is a thermoreceptor that helps to locate the prey[1]. Moccasins are of two types: the cottonmouth and the copperhead. The fourth native poisonous species is the coral snake. Usually small and shy, it accounts for only 1% of all poisonous snake bites in the United States. This snake is not a pit viper; its venom is more like that of the cobras and kraits.

Envenoming usually occurs when the snake bites and injects its victim with venom, which is then absorbed; but because the fangs of the coral snake are ineffective it also chews its victim. One snake, the African cobra, can spit its venom for some distance, but none of the American snakes have this accomplishment.

The venom is injected through fangs (long hollow or grooved teeth) which in most poisonous snakes are located in the front of the mouth. All pit vipers have movable front fangs which are usually folded under the upper jaw, becoming erect when biting. Venom is produced and stored in the parotid salivary glands. It is usually spread via the lymphatic channels, but may rarely be injected directly into the circulating blood. This event is usually catastrophic.

The Venom

Venom is a highly complex biochemical compound. So far, the following components have been recognized.

1. *Blood coagulants, anticoagulants, and agglutinins.* These affect the red cells and coagulation of the blood.
2. *Cytolysins, proteolysins, and antibactericidin.* These affect cellular blood components as well as the endothelium of the vessels. The latter contributes to uncontrolled suppuration, paralyzing the phagocytic activity of the white blood cells.
3. *Neurotoxins.* Type A affects the nervous system, particularly the cardiorespiratory higher centers, while type B usually affects the myoneural junction.
4. *Cholinesterase and anticholinesterase.* These components also affect the myoneural junction.
5. *Cardiotoxin.* This substance stimulates the heart.
6. *Hyaluronidase.* This facilitates the spread of the venom through the tissue.

All the above components are contained in the venom of poisonous snakes[2], but in varying proportions. The venom of pit vipers is high in the hemopathic components, causing damage to blood, tissues, and vessels, while the venom from coral snakes is rich in neurotoxins, primarily producing neurologic symptoms.

Signs and Symptoms of Venomous Snake Bites

Hemopathic symptoms are due to three major causes. The first is endothelial damage of small vessels and lymphatic channels, which produces edema, ecchymosis, extravasation of blood, and bleeding from the kidneys, lungs, peritoneum, rectum, and vagina. The second is injury to the red blood cells, observed in a lowering of the hemoglobin level, bleeding, and tissue anoxia leading to necrosis due to impaired ability of the red blood cells to carry oxygen. The third cause is impairment of the coagulation

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Presented at the Surgical Staff Conference, July 8, 1964.

mechanism, resulting in local bleeding as well as in bleeding from distant sites, such as peptic ulcer.

Neurotoxic symptoms are those referable to the central nervous system, such as dysphagia, convulsions, and psychotic behavior; or to the myoneural junctions, such as locomotor disturbances and local muscle spasm and twitching. General systemic manifestations are elevation or depression of body temperature, nausea and vomiting, diarrhea, pain, restlessness, tachycardia, or bradycardia.

With the bite of the pit viper, the hemopathic and general systemic symptoms are predominant, although neurotoxic effects also occur. With the bite of the coral snake and the cobra, the neurotoxic effects predominate. This paper will deal largely with the pit vipers.

Variables Affecting the Snake Bite

Rattlesnakes are most deadly, relatively speaking, while copperheads are the least deadly of venomous snakes[3]. Cottonmouths and coral snakes are in between. Usually the larger the snake, the more venom it possesses and can inject. An alert, hungry, disturbed snake is deadliest, particularly at the end of the hibernation period. Snakes have less venom shortly after a bite. It has been demonstrated that a snake has complete control over the injection apparatus and the volume of venom injected[4].

Concerning the victim, large adults obviously have a better chance of survival than do children. Morbidity and mortality is higher in the presence of hypertension, bleeding disorders, nervousness, and poor general health. Usually bites on the head and trunk are two to three times more dangerous than those on the extremities. Bites on the upper extremities are more dangerous than those on the lower. It is said that in the United States, most venomous bites occur on the limbs. In the western states, the proportion of bites on the trunk is much higher than in the eastern states.

Prophylaxis

Following are some pointers by which to reduce the incidence and effects of snake bite. Spring and early summer are the worst seasons for bites, since the snakes are hungry after hibernation and have more venom. Snakes are nocturnal animals, and particular caution should be taken at twilight and sunrise, when they leave and return to their lairs. Any shady, moist, concealed spot is a likely place for snakes to congregate and reproduce. These are the so-called snake dens. In snake-infested areas, high boots, thick clothing, and gloves should be worn. On walking through open country, it is wise to have a companion so that if a bite should occur, there will be someone to kill or catch the snake for identification, give first aid, and get further help. It is important to avoid handling snakes that appear to be dead; they may only be injured or faking. Moreover, reflex action can cause the head of a dead snake to bite. Snake-bite kits should be carried in snake-infested areas.

Diagnosis

If the snake is available, either dead or alive, it must be quickly examined to determine whether it is harmless or poisonous. The diagrams in Parrish's paper[5] may be of help in identifying North Carolina snakes. If the snake is not available, a reliable observer may be able to describe it well enough to make an identification. It is most important to determine whether the snake is (1) venomous; (2) a coral snake or a pit viper; and (3) in the case of the latter, whether it is a copperhead, cottonmouth, or rattlesnake. If the snake cannot be identified, the only thing to do is to evaluate the condition of the patient himself. The pattern of the bite should be quickly observed. It is safe to assume that the bite is poisonous if one or more fang marks are present. Absence of fang marks is presumptive evidence of a harmless bite. Fang marks more than 1 cm apart indicate a very large snake, while those of less than 1 cm point to a smaller snake. (Coral snake bite may present an atypical pattern.)

The signs and symptoms are fairly good guides to the type of bite. As mentioned before, swelling, edema, ecchymosis, and pain are the principal signs of pit viper bites. If one or more of the above are present or appear later, treatment should be instituted immediately.

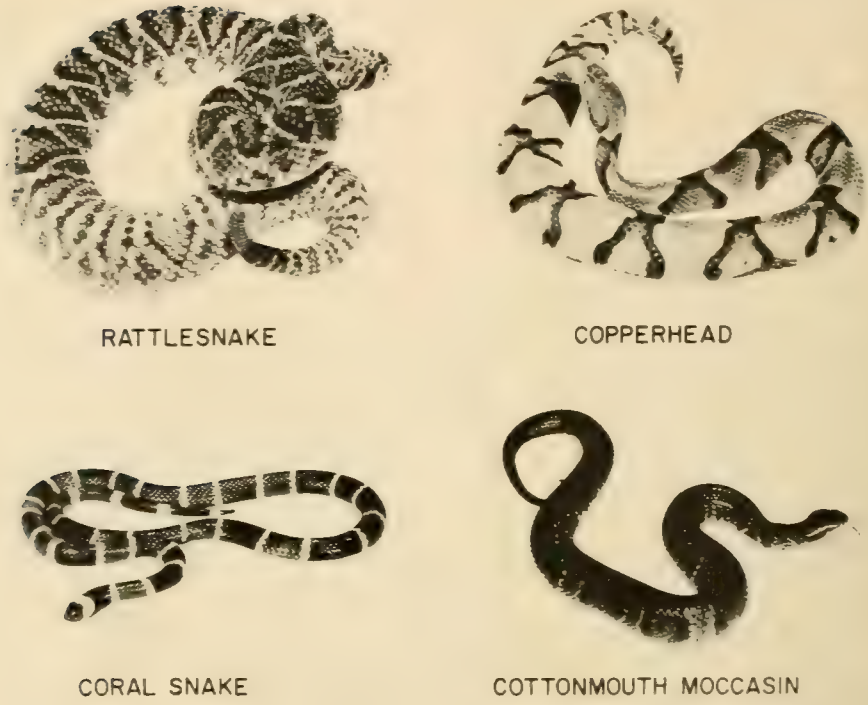


Fig. 1. Poisonous snakes indigenous to North Carolina. (From Parrish, H.E., N. Carolina Med. J. 25: 87-94 (March) 1964.

Treatment

General and first aid measures include rest, which is important in decreasing the metabolism and spread of the venom. The bitten limb should be immobilized in a dependent position, also to decrease spread.

Surgical measures consist of application of a tourniquet and incision. A tourniquet is used to occlude only venous and lymphatic return; arterial circulation to an area that is already in relative anoxia should not be occluded. The tourniquet should be applied a few inches above the bite and should be loosened every 15 to 30 minutes and reapplied higher on the limb. As swelling progresses, the tourniquet should be placed proximal to the closest margin of the edema.

Incisions should be ¼ inch long, ⅛ inch deep, and 2 inches apart. They should be placed not over the fang marks but somewhat above them in the longitudinal axis of the limb. Cruciate incisions should not be used, since they give no better results and cause unnecessary scarring. Incisions should be few and if made on the limbs, should not extend more than one-half the circumference of the limb.

Within the first two or three hours suction applied to the incisions for 15 minutes every half hour is invaluable. Suction kits and devices are desirable, but the mouth can be used if it is washed out periodically. Unless there are cuts in the buccal mucosa, no ill effects will result except possible numbness of the mucous membrane: snake venom is digested and destroyed by gastric juices. Wet compresses can be applied between the periods of suction.

Medical measures to remember are the three A's: either or both *antitoxin* and toxoid of tetanus; *antibiotics*, required because snake bites are notoriously infectious; and *antivenin*, a specific agent designed to neutralize the venom, producing a type of passive immunity[5a]. The antivenin that is usually available (Wyeth Laboratories) is


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$150.00	Up to $30,000.00	$5,000.00	$177.00	$133.00
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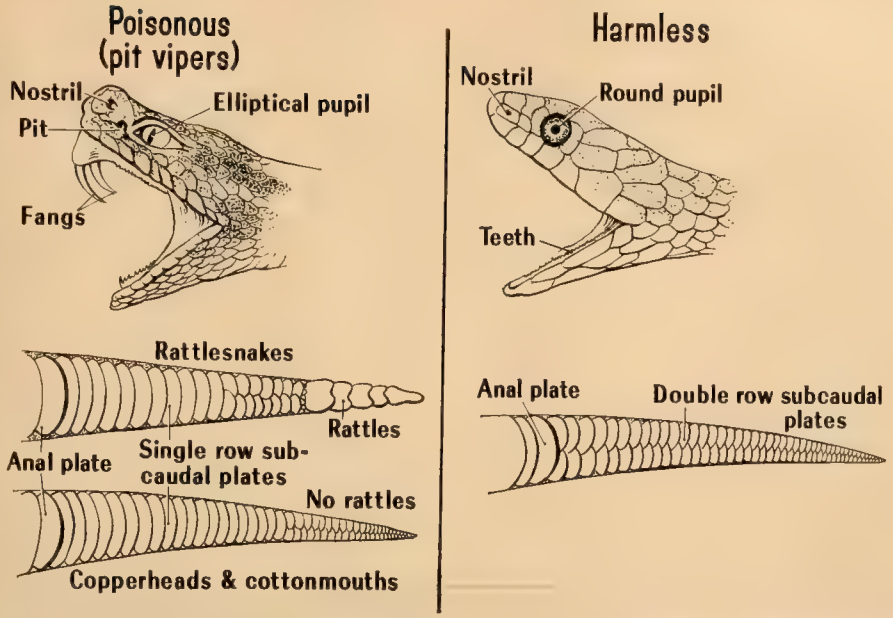


Fig. 2. Identifying characteristics of poisonous (pit vipers) and harmless snakes. (From Parrish, H.M., North Carolina Med J. 25: 87-94 (March) 1964.

polyvalent for the pit viper venoms of North and South America, and should be given as soon as possible. (It is useless against coral snake venom.) Since it is made from horse serum, the patient should be tested for sensitivity to horse serum.

Antivenin comes in vials of 10 cc each. It is suggested that anywhere from one to six vials be used, depending on the severity of the bite and the type of snake involved. Children should get proportionately more, since the aim is to neutralize the venom and not to treat the patient himself. The same amount of venom may be only morbific in an adult while fatal to a child.

Recent studies favor the following route of administration: Inject one-third of the total dose in the tissues around and above the bite site, another one-third intramuscularly in the gluteal area, and the remaining one-third as an intravenous drip. When the bites are overwhelming or swelling is very severe, or when it is feared that the venom was injected directly into a vein, the total dose can be given as an intravenous drip and regulated according to the advance or regression of the swelling and the other symptoms.

Supportive measures are useful. They include keeping the patient warm and at rest, giving intravenous fluids, combating shock if present, and giving blood transfusions in case of considerable bleeding and hemolysis. If convlusions occur, they should be treated with calcium gluconate administered intravenously. Lactate is also of value. In severe cases when respiration is depressed (tracheotomy and a respirator may be needed. Cardiac arrhythmias and possible cardiac arrest are treated in the usual manner. Antihistamines may be useful, and oxygen therapy may be indicated.

Some treatments in use are not recommended. Cryotherapy, or immersion of the limb in equal parts of ice and water for three to four hours, then packing it in ice for 24 to 36 hours, may further jeopardize the injured limb[6]. Local injection of procaine may relieve pain, but the local injection of adrenalin, a vasoconstrictor, is contraindicated. At this time there is no good evidence for the use of ACTH. Subcutaneous injection of saline is sometimes used to wash out the venom, but this is a questionable procedure.

Local excision of soft tissue is risky and should be left to the surgeon's discretion.

It should be undertaken only if the bite is on the trunk, no antivenin is available, less than one hour has elapsed from the time of the bite, and no anatomic contraindications exist. Only then is it recommended that skin and the subcutaneous tissue be excised in a radius of 3 to 4 cm from the fang marks. Barbiturates and opiates should be used with caution and, despite the common belief, alcohol is contraindicated.

Each snake bite must be treated individually, keeping in mind the variety and size of the snake, the size and condition of the patient, and the available facilities. The following section will set forth several pointers on the classification and identification of snakes, the approach to the treatment of their bites in the emergency room, and the use of antivenin.

Types of Poisonous Snakes

Snakes, a suborder (*Ophidia*) of one of the orders of reptiles, are divided into four families[7]: (1) *Colubridae* includes all the harmless snakes. (2) *Hydrophiinae* are sea snakes, which are mostly poisonous, but rarely bite humans, and are found only in the Pacific and Indian Oceans. (3) *Elapinae* are mostly poisonous and include the coral snake in the United States, cobras (*Naja*) and kraits (*Bungarus*) in the Old World, and tiger snakes in Australia. (4) *Viperidae* are all poisonous. Of these *Viperinae* are the true vipers that live in the Old World. *Crotalidae* or the pit vipers are found in the New World. *Crotalus* is the rattlesnake, and common varieties include the eastern diamondback, western diamondback, massasauga, prairie rattlesnake, timber rattlesnake, pigmy rattlesnake, and other species. *Agkistrodon* is the moccasin and includes two groups, *Contortrix,* the copperhead, and *Piscivorus,* the cotton mouth. *Bothrops* or "fer-de-lance" and *Lachesis* or bushmaster are both found in South America.

Three per cent of all snakes found in the United States (19 of 116 species) are poisonous. The poisonous varieties include 15 species of rattlesnakes, 2 of moccasins, and 2 of coral snakes[8]. In general, only rattlesnakes are found in the Northwest and on the Pacific coast, and only rattlesnakes and copperheads in the Northeast. Coral snakes are found largely in the Southeast and Southern Arizona, cottonmouths in the Southeast, and copperheads in the East.

In North Carolina, timber rattlesnakes and copperheads are present throughout the state. The Eastern diamondback rattlesnake is seen in the southeastern coastal area. It is commonly said that cottonmouth ranges in the eastern section of North Carolina as far west as Raleigh; however, this is open to question. The coral snake lives mostly in the southeastern area[9].

Pit vipers have a triangular head, narrow neck, movable front fangs, vertical pupils, and a sharp snout. The adult ranges in size from medium to large. Rattlesnakes specifically have rattles at the end of the tail, or a button or a blunt end if the rattles have been torn off. Only one row of scales is present on the under surface, and the color patterns are numerous. Copperheads and cottonmouths have sharp pointed tails without rattles. Copperheads have one row of scales on the under surface and hourglass-shaped marking on the body. Cottonmouths have a combination of numerous single and double rows of scales on the under surface, while the body markings are somewhat hourglass-shaped in the young and mostly dark-colored or striped in adults. Coral snakes have egg-shaped heads with black snouts and fixed small front fangs. They have a small body characterized by a specific pattern of bright red rings bordered by yellow.

A quick way to identify a snake is to look first at the head. If there are no pits between the eyes and nostrils, it is probably harmless, unless it is a coral snake. If pits are present, the snake is a pit viper and in that case should also have a triangular head with movable fangs and vertical pupils. Look next at the tail. If rattles or a button are present or if the tail is blunt, this indicates a rattlesnake, while a sharp tail indicates a moccasin. In the latter case, examine the color pattern. An hourglass pattern usually indicates a copperhead; a dark color, a cottonmouth, though a young cottonmouth may have hourglass markings.

Returning to the head, if it is small and oval-shaped, lacks pits, and has a black

Table 1

Treatment of Pit Viper Bite

Grades of Poisoning	Signs and Symptoms Within 12 Hours	Surgical Measures	Medical Measures	Precautions etc.
I. Minimal	Moderate pain; edema, 1-6", erythema without systemic signs	Tourniquet, incisions, suctions	Antibiotic, tetanus toxoid, and/or antitoxin	Type and match blood, CBC, urinalysis, clotting time
II. Moderate	Severe pain, tenderness, edema 10-15", erythema, petechiae, ecchymoses, nausea, vomiting, fever, weakness	As above	Plus antivenin locally and antihistamine	Also be ready to combat hemorrhage
III. Severe	Widespread pain, tenderness, edema 10-20", ecchymoses, systemic signs, vertigo	Plus tight tourniquet for an hour until antivenin is available	Plus electrolyte maintenance, Ca gluconate, antivenin as I.V. drip	Also be ready to do tracheostomy and support respiration if needed
IV. Very severe	Rapid swelling, ecchymoses, CNS symptoms, visual disturbance, shock, convulsions	Tourniquet completely occluding limb, which will lead to amputation	Plus massive I.V. doses of antivenin	Also watch for cardiac arrest, renal failure

snout and small fixed front fangs, suspect a coral snake. Its color pattern is invariably red rings bordered by yellow. If the snake lacks these characteristics, particularly if it is large, it is harmless. The coral snake has relatives, but their snouts are red or gray, not black, they lack fangs, and the pattern is that of red bordered by black. A mnemonic to remember is:

"Red on yellow, kill a fellow" (coral snake)

"Red on black, venom lack" (harmless snake).

What to Do

General and immediate steps are local cleansing, injection of tetanus antitoxin and/or toxoid, and rest. Meanwhile, identify the snake, if possible. If it is harmless, the patient can be released; if it is poisonous or not identifiable, the following steps are recommended: If there are no immediate signs and symptoms, observe the patient for at least 12 hours and preferably 24. Then, if the patient is still asymptomatic, he may be released. If a delayed venom reaction occurs, most often encountered with the coral snake bite, treat accordingly. Also treat local symptoms of pain and swelling.

Table 1 is a useful guide to the treatment of a pit viper bite[10].

Coral snake bites produce few hemopathic manifestations, but predominantly neurologic ones. General supportive measures should be used, but the polyvalent antivenin is useless. (Specific antivenin is available from the Instituto Butantan, Brazil[11]. The cobra antivenin is also considered helpful and can be obtained from most of the larger zoos). As a rule the copperhead bites (most common in the eastern United States) are the least dangerous, and unless the snake is very large or the victim very small, antivenin will not be necessary.

Bites of rattlesnakes and cottonmouths, unless falling into the minimal category, should be treated with antivenin. Antivenin (*Crotalidae*) is polyvalent and is prepared from hyperimmune horse serum, using venom of the eastern diamondback, western diamondback and tropical rattlesnakes, and fer-de-lance. It is available as a powder to be mixed with sterile water.

The above venoms contain basic antigens

common to most of the pit vipers of the Americas, including rattlesnakes, domestic moccasins, the fer-de-lance and bushmaster of South America, and vipers of Japan and Korea[12]. Before the antivenin is administered, the patient should be tested for sensitivity to horse serum via an injection of 0.02 ml of a 1:100 dilution of horse serum. A large wheal appearing in 5 to 15 minutes, with or without pesudopods and erythema, is suggestive of sensitivity. As an alternative, one may perform a conjunctival test by placing a drop of diluted horse serum into the conjunctival sac. Swelling and itching of the conjunctiva in 5 to 15 minutes indicates a positive reaction. Adrenalin must always be ready in case a reaction should take place[12].

As for the future treatment of snake bite, three new developments are in the making. A coral snake antivenin is to be made available soon. EDTA has been found to cut short the necrotizing effect of the snake venom on the tissues[13]. This measure may well become an important adjunct in snake bite therapy. Long range research is under way for the development of a universal antivenin, potent against the venom of all the known poisonous snakes[13].

Summary

A discussion of poisonous snakes indigenous to the United States, and specifically to the state of North Carolina, is presented. An easy, rapid, and practical apporach to the causes, treatment, and prevention of snake bites is given. A simple means of distinguishing between poisonous and harmless snakes is presented to help physicians approach an uncommon subject with scientific precision.

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The Plight of the Fetus

There are certain drugs which are very hazardous to the fetus. There are others which, experiments indicate, may be dangerous. Then there are those drugs which are circumstantially suspected of being hazardous. This leaves few drugs available for use. Medication cannot stop altogether while physicians wait for the future to provide the answers. As current guide lines, when the parturient needs treatment, drugs must be judged not on the impossible basis of absolute safety, but on a basis of no known added risk. With such a standard, the physician can continue to prescribe for his patients.—Editorial in *Massachusetts Physician*, 23:7, (Mar.) 1965.

Case Reports from the Committee on Cancer

Simultaneous Bilateral Breast Cancer

This is a clinical report of a patient who had bilateral intraductal carcinoma of the breast and underwent bilateral radical mastectomy, the operations being 23 days apart. On each occasion the pathologist reported infiltrating ductal carcinoma of the breast, and the surgeon believed them to be separate tumors arising simultaneously.

Case Report

A 44 year old white woman complained of left breast tumor of one month's duration. No symptoms or signs were associated. The left breast had a 1.5 by 2.1 cm nodule in the left upper outer quadrant, nontender, freely movable, and without bleeding or discharge from the nipple. The axillary and pectoral lymph nodes were not enlarged The right breast was unremarkable.

Aside from a hemoglobin of 10.5 gm, there were no abnormal laboratory findings. The chest film was unremarkable.

Radical mastectomy was performed without incidence. Seventeen days later the patient found a mass in her right breast, 0.5 by 0.5 cm, firm, hard, and nontender. This was removed on an outpatient basis and found to be an intraductal carcinoma.

The patient was again admitted to the hospital and a right radical mastectomy was done. No residual carcinoma was found in the breast. The axillary lymph nodes were unremarkable.

For editorial comment, see page 252

During the six years following these operations she had several other operative procedures on pelvic organs, culminating in the removal of the uterus, tubes, and ovaries. The principal pathologic finding was uterine fibroids and leiomyomas, with no evidence of cancer in the abdominal viscera. A recent chest film has shown no metastasis.

Comment

This case is of interest because of the evidently simultaneous occurrence of carcinoma of the breast in this 44 year old patient. As physicians, if one cancer occurs we tend to forget that the patient may have another, and as this case illustrates, may even have another cancer occurring at the same time. With carcinoma increasing in our population, physicians should be increasingly aware of multiple malignant tumors occurring in the same organ, as in this case, or more commonly occurring in different anatomic sites.

Errata

The editors regret two errors which were made in the titles of two scientific articles appearing in the May issue of the NORTH CAROLINA MEDICAL JOURNAL.

The title of the article by Drs. Martin J. Kreshon and Marvin N. Lymberis (page 188) should read: "Headache, Nausea, and Vomiting Due to Undiagnosed Glaucoma."

The title of the article by Dr. Odell C. Kimbrell, Jr. (page 211) should read: "Obstructive Dyspnea: Rheumatoid Arthritic Involvement of Craniomandibular Structures the Underlying Disease."

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JUNE, 1965

INSTITUTES ON CONSTITUTIONAL DEMOCRACY AND TOTALITARIANISM

Last summer institutes on Constitutional Democracy and Totalitarianism were held in Greenville and Boone. Their purpose? To teach by dramatic contrast the merits of a conservative democracy as opposed to foreign idealogies contrary to the American way of life. Outstanding authorities from across the nation instructed approximately 100 students in the two institutes. The majority were teachers and are now applying their learning to students of the high-school level. These courses are conservatively oriented. They support the American concept of reward commensurate with initiative and demonstrated worth, and expose the fallacies of socialistic philosophy. The Institutes are sponsored by the North Carolina Educational Council on National Purposes and are financed by private foundations and business institutions.

Socialistic activities have long been of concern to the medical profession. These Institutes should be a welcome ally, and it is our thought that county medical societies might wish to participate, not by general contributions, but by providing one or more scholarships for students or teachers *from their county* at approximately $250.00 each. This is *not* a solicitation for contributions, but an attempt to acquaint you with a project we consider worthy.

Should you be interested either individually or as a county unit and wish to obtain more information or sponsor a student, please communicate with the N. C. Educational Council on National Purposes, Inc., P. O. Box 988, Raleigh, N. C.

T. S. RAIFORD, M.D.

* * *

BILATERAL BREAST CANCER

The breast has been described as a precancerous organ, as well it might in view of the frequency of its cancers. The Germans long ago warned that a woman with a cancer in one breast should be carefully observed lest a tumor appear in the other. The Cancer Committee report in this issue lends emphasis to both these observations. No one can say with certainty that the tumors found in this month's patient were separate and simultaneous; it must stand as a reasonable inference from the facts. Since she has done well since operation, her case affords both instruction regarding some facts about breast cancer and hope regarding its treatment.

* * *

PREVENTIVE MEDICINE FOR ANNOUNCERS

One of the hazards of occupations in which the voice is used loud and long is the development of vocal nodules, or "singer's nodes." Although singers are involved, the disease also occurs in drill sergeants, primary school teachers, mothers of large families, and so on. Since they fall into this

group, radio and television announcers have a proprietary interest in measures to spare themselves, and apparently have taken steps in that direction. Gradually the air waves have become filled with whispering announcers, murmuring the virtues of all sorts of products which have no element of shame about them. Perhaps they got started by announcing golf matches, noted how much better they felt, and got into preventive medicine by accident. More likely the mass psychologists who manipulate them felt that shouting had lost its impact and that maybe whispering would get through another threshold. Whatever the reason, the audience has reason to be grateful. Perhaps we can now convince the stations to spare their transmitters and keep the volume down, thus slowing the advance of a mass outbreak of "tin ear" in our sound-saturated society.

* * *

ALEXANDER CHESTER BULLA, M.D.

A native of Randolph County, his dream and ambition as a young man was to become a general practitioner in a small community. A third generation representative of a family that produced seven physicians, graduate of the North Carolina Medical College at Charlotte, he came under the influence of Dr. George M. Cooper, who diverted him into public health. He became, after his graduation in 1915, school inspector for the State Board of Health, Director of Public Health for Forsyth County, and for 37 years Health Director for Wake County, where he was honored, in 1960, by the dedication of the A. C. Bulla Health Center.

A devoted public servant, esteemed friend of his colleagues and, since his retirement in 1958, intrepid world traveler, Dr. Bulla has maintained a record of perfect attendance at the Annual Sessions of this Society for 49 years.

It is appropriate that in recognition of this achievement, and of "significant contributions to the public health, Dr. Bulla should receive the Society's Award of Merit at its 111th Annual Session held in Charlotte in May. The JOURNAL congratulates him for an honor that is well deserved.

J.S.R.

* * *

JARGON IN SPORTS INJURIES

An AMA news release promises an April progress report by a subcommittee trying to develop a standard nomenclature for sports injuries. Eventually it is hoped that both physicians and trainers will be able to use the nomenclature to translate the language of one group into that of the other. While most of us have a reasonable notion of what is meant by a "charley horse," the term "skin splint" is less familiar and perhaps used less precisely. Not only should such a nomenclature be useful for the groups named, but it might come in handy for sportscasters, who seem to be a major educational force at present, especially in professional football. Perhaps we can look forward to hearing less of that overworked euphemism "shaken up," and find it replaced by a precise expression, in both trainerese and medical English, of the nature of an injury while watching it being incurred on the instant replay.

We all have each his own formulation of what is the essential difficulty in the world. My formulation, in broadest terms, would start with the assertion that we all face a peculiarly unfamiliar problem, namely, how to survive prosperity . . . To paraphase a Chinese proverb, 'To share poverty is easy; to share wealth, difficult.'—Alan Gregg in *Challenges to Contemporary Medicine*, Columbia University Press, 1956, pp. 15-16.

Bulletin Board

Coming Meetings

Duke Medical Postgraduate Course—Atlantic Lodge, Atlantic Beach, July 12-17.

New Hanover County Medical Symposium—Blockade Runner Hotel, Wrightsville Beach, July 23-24.

Seventh Annual Southern Obstetric and Gynecologic Seminar, Inc.—Grove Park Inn, Asheville, July 26-30.

North Carolina Academy of General Practice, the Physician's Institute—Hotel Jack Tar, Durham, July 28-August 1.

Charlotte Postgraduate Seminar—Presbyterian Hospital, Charlotte, September 29-30.

Fifth District Medical Society, Annual Meeting—Mid Pines Club, Southern Pines, October 6.

Tennessee Valley Medical Assembly—Tivoli Theater, Chattanooga, Tennessee, September 27-28. Frank B. Graham, M.D., Chairman, 101 Medical Arts Building, Chattanooga, Tennessee.

New Members of the State Society

Drs. George W. Evans, Path, 206 Oakum Street, Edenton; George Elliott Ennis, I, 194 Lake Concord Rd. Concord; Clarence Edens, Anes, Balsam Grove; Anne Preston Askew, Pd, 4504 Pitt St. Raleigh; Cynthia Stoltze Hardison, I. 1300 St. Mary's St., Raleigh; David Lee Sarrett, ObG, 1440 Dixie Trail, Raleigh; Mortimer Dantzler Heizer, GP, Box 10, Farmville; Roletta O. Jolly-Fritz, P, Box 8003, Greensboro; Harold Joseph Fallon, GE, N. C. Memorial Hospital, Chapel Hill; Alton R. Mayberry, P, Rt. 1, Himberley Dr., Durham; Charles Willis Neville, Jr., P, Duke Med. Center, Durham; Thomas Waters Robbins, Jr., 403 Quail Dr., Goldsboro; Hsioh shan Wang, P, 607 Central Ave., Butner; Emil H. Henning, Spring at Jackson St., Sylva; Robert McLelland Stevenson, R, 440 Oakhurst Rd., Statesville; Charles Herbert Zemp, Jr., Pd, 418 King St., Laurinburg; Austin Dale Gullett, 104 Thomas St., Spray; Lewis Floyd Brinton, Mooresville; Cooper Dave Kunkel, Oph, 701 Professional Dr., New Bern; Carol Jean Smith, GP, 43 Edgewood Rd., Asheville; John Tracy Roper, Or, 1012 Kings Dr., Charlotte; George Brainard Higley, Jr., 1669 Owen Dr., Fayetteville; Kenneth Franklin McCain, Pd. Davis Hospital, Statesville.

News Notes from the University of North Carolina School of Medicine

The teaching programs of the University of North Carolina School of Medicine will be broadened to include training in some community hospitals outside of Chapel Hill.

Dr. Isaac M. Taylor, dean of the medical school here, expressed the hope that "affiliations" with hospitals in other areas of the state would prove of value to the hospitals and to medical students.

"Our faculty, house staff and medical students can benefit from experiences outside of the medical center here," Dr. Taylor told members of the UNC Medical Alumni Association at their annual meeting. "Affiliations with community hospitals would provide circumstances more like what our students will encounter when they establish their practices."

Fourth-year medical students already are selected for a popular program at Dorothea Dix Hospital in Raleigh. Under medical faculty supervision, they are staffing a 40-bed acute ward there.

Dean Taylor said the proposed extension of the medical training programs into community hospitals "will show our students that rigorous and satisfactory medical practices exist in these hospitals.

* * *

The UNC Medical Alumni Association installed Dr. John F. Lynch, Jr. of High Point as president of the Association. He succeeds Dr. Thomas G. Thurston of Salisbury.

Dr. John R. Chambliss of Rocky Mount was named president-elect and Dr. H. McLeod Riggins of New York City was elected vice president.

Three new councilors are Dr. G. Earl Trevathan of Greenville, Dr. James E. Davis of Durham and Dr. Foyell P. Smith of Lexington.

* * *

A 34-year old assistant professor of medicine at the University of North Carolina School of Medicine here has been selected to share in a $250,000 grant by Lederele Laboratories, a division of American Cyanamid Co.

Dr. Ellis L. Rolett will receive a Lederele Medical Faculty Award valued at $19,859 to promote his abilities as a medical investigator, teacher and scholar.

Dr. Rolett is a native of New York City and an honor graduate of the Harvard University Medical School (1955). He is a former captain in the U. S. Air Force and completed his advance medical training at Massachusetts General Hospital and Peter Bent Brigham Hospital, both in Boston.

He joined the UNC medical faculty in mid-1963. His major research interests are in the area of heart performance and metabolism of the heart muscle.

* * *

W. T. Harris of Charlotte, president of the Harris-Teeter supermarket chain, was elected president of the Medical Parents Club of the University of North Carolina at the ninth annual meeting held recently.

He succeeds J. C. Cowan, Jr. of Greensboro, vice chairman of the Board of the Burlington

Industries textile mill chain.

Other new officers of the club are Howard Holderness of Greensboro, first vice president, R. P. Richardson of Reidsville, second vice president, and W. F. Algary of Asheville, secretary.

An estimated 400 attended the all-day Parents Day meeting.

* * *

Problems of planning the construction of health care facilities were explored by hospital administrators, hospital trustees and architects at a two-day meeting at UNC.

A workshop on "Programming and Planning Hospital Facilities" is scheduled on May 7-8 under the joint sponsorship of the University of North Carolina Department of Hospital Administration here and the American Institute of Architects.

Cooperating in conducting the workshop are the North Carolina Medical Care Commission, the North Carolina Hospital Association, the Duke Endowment and the North Carolina State School School of Design in Raleigh.

Long-range planning will be one of the major items on the program.

* * *

An artist, a surgeon, a student health physician and an attorney were presented 1965 Distinguished Service Awards at the annual dinner meeting of the Medical Alumni Association of the UNC School of Medicine.

All of the awards were presented "in recognition of your high service to medicine and to your fellow man."

Miss Ruth Faison Shaw of Chapel Hill, "distinguished daughter of North Carolina, noted artist, creative teacher and developer of the technique of finger painting. Through this medium (of finger painting), she has helped children and adults to express their creativity and has provided a helpful means of studying those in whom hidden emotions create problems."

Dr. Verne Hamilton Blackwelder of Lenoir, surgeon, hospital director, and community-minded citizen, who "has given generously of his time, efforts and finances in support of the expansion of the medical school and of its continued development."

Dr. Edward McGowan Hedgpeth of Chapel Hill, director of the UNC Student Health Service and faculty and staff member for 30 years. "As physician, teacher, administrator, confidant, and adviser of students and faculty, as a wise and conscientious chairman of the Faculty Committee on Admissions and, earlier, as one of the large group of crusading alumni who fought vigorously and unceasingly for the expansion of the University's school of basic medical sciences, he well merits the lasting gratitude of his alma mater."

Judge Frederick Oscar Bowman of Chapel Hill, lawyer and public-spirited citizen. "Through his zeal, energy, and good judgment in promoting the interests of his alma mater and the School of Medicine, he has made significant and lasting contributions to their development."

* * *

A noted Boston neurologist was a visiting professor in the Division of Neurology at UNC recently.

Dr. Derek E. Denny-Brown, James Jackson Putnam professor of neurology at Harvard Medical School and director of the neurological unit at Boston City Hospital, spent three days at the medical school and N. C. Memorial Hospital in April.

While here, Dr. Denny-Brown spoke on the nature of dystonia, a severe disorder of the muscles and the function of the cerebellum.

News Notes from the Duke University Medical Center

A group of Duke University researchers has implicated stressful or night-marish dreams as a cause of the sudden, severe chest pain that comes when a sick heart becomes overworked.

The report on the study, conducted by a team of Duke researchers, was presented at the annual meeting of the American Federation for Clinical Research held recently in Atlantic City.

Dr. John Nowlin, clinical research associate at the Duke Medical Center, told the gathering that a series of intricate tests on patients with coronary artery (heart) disease showed that episodes of nighttime angina pectoris were preceded by dreaming.

Victims of coronary artery disease have long been told by medical men to avoid strenuous exercise, stress, and anxiety as a means to prevent daytime episodes of angina. But the reasons for the relatively common nighttime episodes when a person supposedly is in his most relaxed state remained a puzzle.

In an interview prior to his speech, Dr. Nowlin said that medical men must consider methods to treat "dream anxiety" as another way to treat angina.

While no attempt was made to determine what kinds of dreams brought on the attacks in this particular study, Dr. Claude Nichols, another member of the Duke team, said that other studies showed that the implicated dreams involved fear, anxiety or exertion.

* * *

The grip on cystic fibrosis has been tightened with the approval of a $26,000 grant renewal to Duke University Medical Center to fight the dreaded child killer.

The renewal means continuation of the Cystic Fibrosis Regional Care, Research, and Teaching Center at Duke.

Dr. Alexander Spock, director of the Center, made the announcement recently.

Students at Duke University Medical Center are building a model that will send "real live action" into high schools across the United States.

The new model will not be constructed of steel. It will be fashioned out of statistics and success stories.

Its purpose is to stimulate interest in the various health fields as career possibilities and let high school students know how these careers look from the inside.

Recently the Duke Medical Center Health Careers Recruitment Team of medical students has attracted attention from the Student American Medical Association's (SAMA) national headquarters.

Now Merck-Sharpe-Dohme Pharmaceutical Co. of New York has given the Duke student organization a grant with which to study their own program and make a model of it on paper.

Results of the study then will be forwarded to SAMA national headquarters where a model plan based on the Duke program will be drafted and made available to similar university and medical center student organizations in the United States which have no such program.

* * *

A member of the staff of the Duke Medical Center has been named president-elect of an international society of neuroanatomists and neurologists.

Dr. R. Frederick Becker was elected to the post at the annual meeting of the Cajal Club in Miami, Fla. The Cajal Club membership is composed of some 200 anatomists and neurologists from the United States and foreign countries.

An associate professor of anatomy at Duke, Dr. Becker is a native of Methaven, Mass. He received B.S. and M.S. degrees from Massachusetts State College and his Ph.D. from Northwestern Medical School.

From 1961 through 1963, Dr. Becker served as a medical educator to Thailand under the auspices of the International Cooperation Administration of the U. S. State Department. He played a key role in the organization of a department of anatomy in a new medical school in Thailand.

The National Council to Prevent Blindness has tapped a Duke University Medical School junior to receive a student fellowship worth $400.

Emanuel Newmark will study the cause of corneal ulceration under a Fight-for-Sight fellowship beginning Nov. 1, 1965, and ending Dec. 31, 1965.

The two-month study will be conducted under the supervision of Dr. Banks Anderson, Jr., department of ophthalmology, Duke Medical Center.

The sponsoring agency is a non-profit organization founded in 1946 to advance and support eye

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* * *

Lewis G. Zirkle, a junior in Duke Medical School, won first place with a scientific paper presented at the North Carolina State Medical Society meeting in Charlotte. He competed against students from the University of North Carolina School of Medicine and Bowman Gray School of Medicine.

Duke students have taken first place for the last seven consecutive years, according to Duke Medical School records.

Zirkle's topic was "Effects of Oxygen Toxicity on the Central Nervous System." The first place award netted him a $50 savings bond. Mrs. Zirkle is a senior medical student at Duke.

* * *

Medical training centers must reverse a trend toward thinking of doctors who enter private practice as "flunk-outs" of the royalty of academia," the president of the American Federation for Clinical Research said recently.

Dr. Morton I. Bogdonoff, professor of medicine at Duke, made the statement during his presidential address at the annual meeting of the federation held in Atlantic City in May.

"More often than not, he (the private practitioner) is considered to have 'flunked out,' usually from the research laboratory, and therefore he now has to go into practice," said Dr. Bogdonoff.

Actually, the reverse of this current trend of thought is true, he said, adding that clinical practice of medicine and actual care of man's ills is "the most difficult and prestigious task of all."

Calling for medical curricula to pay more attention to social sciences and the "humanness" of man. Dr. Bogdonoff urged doctors never to forget that the end result of what they seek is better care for their patients.

He suggested two specific areas of legitimate concern in which academic leaders had been slow to move: the establishment of health care insurance systems and discrimination in medical schools and hospitals.

"Since our main business is to be concerned with all the factors that create discomfort and diseases in man, these issues are also very much within the province of our interest and responsibility," he said.

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News Notes from the Bowman Gray School of Medicine of Wake Forest College

Dr. Eben Alexander Jr., professor and director of the Section on Neurosurgery at the Bowman Gray School of Medicine, was named president-elect of the Harvey Cushing Society at the organization's annual meeting in New York City.

He will be installed as president in April, 1966, and will succeed Dr. Francis Murphey, professor of neurosurgery at the University of Tennessee School of Medicine.

Dr. Alexander, chief of professional services at N. C. Baptist Hopsital for the past 12 years, has served three-year terms as secretary and as treasurer of the Harvey Cushing Society. He also is a member of the editorial board of the **Journal of Neurosurgery.**

He is a former secretary-treasurer of the American Academy of Neurological Surgery and a former vice president of the Neurosurgical Society of America.

* * *

Promotions for 17 members of the faculty of the Bowman Gray School of Medicine have been approved by the trustees of Wake Forest College.

Dr. Thomas B. Clarkson Jr., director of the Department of Laboratory Animal Medicine, and George C. Lynch, director of the Department of Medical Illustration, were elevated to the rank of full professor.

Promoted to associate professor were Dr. A. Robert Cordell, surgery; Dr. Charles E. McCreight, anatomy; Dr. J. Stanton King, urology research; Dr. Norman H. Leake, reproductive biology research; Dr. Jesse H. Meredith, surgery; Dr. D. Louise Odor, anatomy; and Dr. Joseph E. Whitley, radiology.

Promoted to assistant professor were Dr. David D. Anderson, orthopedics; Dr. Joseph L. Borowitz, pharmacology; Dr. Margaret C. Conrad, physiology; Dr. Eugene B. Linton, obstetrics and gynecology; Dr. William M. McKinney, neurology; Dr. A. Leonard Rhyne, biostatistics; and Dr. William McCall, clinical medicine.

Dr. Franklin Young was promoted from research associate in biochemistry to research instructor in medical genetics (biochemistry).

* * *

An assistant professor and two instructors were appointed recently to the faculty of the Bowman Gray School of Medicine.

They are Dr. Monroe Cole, assistant professor of neurology and associate in anatomy; Dr. James A. Bowen, instructor in laboratory animal medicine; and Dr. Billy C. Bullock, instructor in laboratory animal medicine.

For the past three years Dr. Cole has served with the U. S. Army Medical Corps at the Walter Reed Army Institute of Research. He is a former instructor in clinical neurology at Georgetown University School of Medicine.

A native of New York City, he was graduated cum laude from Amherst College and received the M.D. degree (magna cum laude) from Georgetown University School of Medicine. He took postdoctoral training at the Seton Hall-Jersey City Medical Center and Massachusetts General Hospital.

Dr. Bowen, a native of Abilene, Texas, holds the B.S. and D.V.M. degrees from Texas A. and M. University where he has served for the past year as instructor in surgery on the faculty of the College of Veterinary Medicine.

Dr. Bullock, a native of Amarillo, Texas, has studied at the Bowman Gray School of Medicine for the past two years as a fellow in laboratory animal medicine.

A graduate of Texas Technological College, he holds the D.V.M. degree from the Texas A. and M. College of Veterinary Medicine.

* * *

W. Michael Bolt of Charlotte, a senior medical student at the Bowman Gray School of Medicine, has been awarded the Outstanding Senior Scholar Award by the Z. Smith Reynolds Foundation.

The $1,000 award was presented May 14 at the annual Reynolds Scholarship Awards banquet. Dr. William B. Castle, Francis Weld Peabody Professor of Medicine at Harvard Medical School, was the banquet speaker. Dr. Castle also appeared at the Bowman Gray School of Medicine as the third speaker of the recently established Reynolds Foundation Distinguished Lectureship Series.

* * *

The Wake Forest College Chapter of the Society of the Sigma Xi was formally established May 11 during installation ceremonies at the College.

Dr. Farrington Daniels, national president of the honorary research organization, was installing officer.

The chapter is an outgrowth of the Sigma Xi Club of the Bowman Gray School of Medicine which was organized in 1956.

* * *

Five staff members and a graduate student of the Department of Anatomy participated in the annual meeting of the American Association of Anatomists in Miami Beach, Fla. Presenting papers were Dr. Walter J. Bo, professor of anatomy; Gene L. Colburn, graduate student; Dr. Charles E. McCreight, assistant professor of anatomy; Mrs. Dorothy Sulkin, research assistant; Dr. Norman M. Sulkin, professor and chairman of the department, chaired a section on Neurology, and Dr. D. Louise Odor, assistant professor, presented an exhibit on "The Ultrastructure of Ovarian Follicles of Prepubertal Hamsters."



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Dr. Howard H. Bradshaw, professor and chairman of the Department of Surgery, addressed the Washington Academy of Surgery April 12 in Washington, D. C. He spoke on "An Attempt to Tell the Clinical Story of the Parathyroid Glands, Especially in Hyperfunctioning States."

He served as visiting professor of surgery at George Washington University School of Medicine April 12-13 and delivered the Tompkins Lecture on April 14. He spoke on "The Mechanics and Pharmo-Dynamics of Chronic Obstructive Pulmonary Emphysema."

* * *

Two members of the Bowman Gray faculty participated in a postgraduate seminar at the annual meeting of the American College of Obstetricians and Gynecologists in San Francisco, Calif. Dr. Clark E. Vincent, professor of sociology, spoke on "The Anxious Adolescent and the Perplexed Parent." Mrs. Ethel M. Nash, assistant professor of preventive medicine, spoke on "Marriage Relationships and Problems."

Three papers and two exhibits, prepared at the Bowman Gray School of Medicine, were presented at the 17th annual meeting of the American Academy of Neurology in Cleveland, Ohio. Presenting papers were Dr. Richard Janeway, assistant resident in neurology; Duke B. Weeks, senior medical student; Wilson K. Wallace, sophomore medical student.

Exhibits were presented by Dr. William M. McKinney, instructor in neurology, and Dr. Janeway.

Three papers, prepared in the Department of Microbiology, were presented at the 65th annual meeting of the American Society for Microbiology in Atlantic City. Presenting papers were Doyle J. Evans Jr., graduate student; Dr. Samuel H. Love, assistant professor; and Dr. Stephen H. Richardson, assistant professor.

* * *

Nineteen papers, prepared at the Bowman Gray School of Medicine, were presented at the 49th annual meeting of the Federation of American Societies for Experimental Biology in Atlantic City.

Faculty members presenting the papers represented the departments of biochemistry, pathology, pharmacology, physiology, laboratory animal medicine and the Section of Reproductive Biology of the Department of Obstetrics and Gynecology.

News Notes from the North Carolina Heart Association

Dr. Henry D. McIntosh of Durham has been named associate editor of **Modern Concepts of Cardiovascular Disease,** to serve with the new

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New officers of the North Carolina Association of Professions. Reading from left to right: William W. Dodge III, first vice president; Earl L. Knox, president; John R. Kernodle, immedite past president; W. J. Smith, secretary; and John S. Rhodes, second vice president. Not pictured is Robert G. Bourne, treasurer.

editor Dr. Edward S. Orgain, also of Duke, beginning January 1966.

The American Heart Association's scientific journal is sent each month to 120,000 physicians and scientists throughout the country. Editorial offices, now at Johns Hopkins in Baltimore, will be moved to Duke University Medical Center later this year, according to an earlier announcement.

A graduate of Davidson College. Dr. McIntosh obtained his M.D. degree from the University of Pennsylvania. He is professor of medicine at Duke University Medical Center, where he is director of the cardiovascular laboratory. He is a past president and a current director of the North Carolina Heart Association.

* * *

Dr. Daniel Test Young of Chapel Hill was installed last month as president of the North Carolina Heart Association. He is an associate professor of medicine at the University of North Carolina School of Medicine and director of adult catheterization studies at Chapel Hill's North Carolina Memorial Hospital.

A 1946 graduate of Guilford College, Dr. Young attended the UNC School of Medicine and received his M.D. degree from Harvard Medical School in 1950. A longtime member of the North Carolina Heart Association's board of directors, he was elected president-elect of the state heart group at its annual meeting in Charlotte last year. He succeeded Dr. Herbert O. Sieker, of Duke, as the group's president at its annual meeting in Durham on May 21.

* * *

Mrs. Walter S. Cobb, of Gastonia, is North Carolina's Heart Mother of the Year for 1965. A childhood rheumatic fever victim, she underwent heart surgery after delivery of her first child, now leads a busy life as housewife, mother, Heart Association volunteer, and full-time nurse.

North Carolina Association of Professions

One hundred thirty-five persons heard Governor Dan K. Moore address a luncheon meeting held as part of the second annual meeting of the North Carolina Association of Professions in Raleigh recently.

New officers of the association (see picture) are: Earl L. Knox, D.V.M., Raleigh, president; William W. Dodge III, Raleigh, first vice president; Dr. John S. Rhodes, Raleigh, second vice president; W. J. Smith of the North Carolina Pharmaceutical Association, Chapel Hill, secretary; and Robert G. Bourne, Raleigh, treasurer. Dr. John R. Kernodle of Burlington, is immediate past president, and will continue to serve on the Executive Committee.

The North Carolina Association of Professions has 347 individual members to date, and expects to have 500 by the end of 1965. Its primary purpose is to build understanding and respect for professionalism and the "free and private enterprise system." The association has had the full support and endorsement of the State Medical Society since its beginning.

News Notes from the American Medical Association

A book that gives physicians much needed information about new drugs is nearly ready for distribution.

Issued by the Council on Drugs of the American Medical Association and titled simply "New Drugs," it was designed to meet the specific needs of the practicing physician for a source of up-to-date, authoritative, and unbiased information on single entity drugs introduced within the past 10 years. Physicians may buy the 500-page book from the AMA at a cost of $5.00 per copy.

Before prescribing a drug, the physician wants to know: What does it do? How effective is it in comparison with similar drugs? What are its side effects?

This is the need filled by "New Drugs."

In some ways, "New Drugs" parallels a volume formerly issued annually by the Council on Drugs under the name "New and Nonofficial Drugs." In the case of both the older book and "New Drugs," statements made about drugs are based on evaluation of laboratory and clinical evidence by the Council and its many consultant experts. Evidence is gathered from manufacturers and published scientific reports; no original laboratory or clinical research is done by the Council. Statements about a drug may be either favorable or unfavorable, but inclusion of a drug in the book does not constitute Council approval; each statement is simply the most authoritative and objective consensus the Council could obtain.

Otherwise, "New Drugs" is an entirely different book from "New and Nonofficial Drugs." Not only does it have a new format and larger scope but it is organized and oriented toward therapy to make it most useful to the practicing physician. It takes its place as a very significant part of the Council's continuing drug information program, which also includes the receipt and dissemination of adverse drug reaction reports and regular communication of drug information to the medical profession through articles in the **Journal** of the AMA.

The book is organized into chapters and sections based, insofar as possible, on therapeutic uses of the new drugs rather than their chemistry and pharmacology. Each chapter or major section is prefaced by an introductory statement that discusses the relationship of the drugs to each other and to older drugs.

Plans call for updating of "New Drugs" annually, with future editions to appear no later than April 1.

* * *

Applications are now being accepted by the American Medical Association from persons wishing to attend a Western Hemisphere Congress on Nutrition, to be held in Chicago November 8 to 11.

Attendance will be limited to one thousand persons, with proportionate representation from the disciplines of medicine, food technology, veterinary science and medicine, agriculture, dentistry, dietetics, and social anthropology.

Applications to attend the Congress should be sent to the Department of Foods and Nutrition, American Medical Association, 535 North Dearborn, Chicago, Illinois, 60610. The applicant's title and area of interest should be included. Applications should be made by July 1; applicants accepted will be notified by July 30.

Registration fee for the four-day meeting will be $25, and will include the printed proceedings of the Congress and a banquet. The fee should not be sent until requested.

AMA Loan Guarantee Fund

The AMA Loan Guarantee Fund has passed its second successive year of increased loan activity.

The number of loans made by the three participating banks in 1964 totalled 7,415, an increase by 4% from the 6,533 granted in 1963.

Loans to medical students, interns, and residents all were in greater number in 1964, but the largest gain was registered by residents. Nearly a third more were received by this troup of trainees in 1964 than in 1963.

Loans granted to North Carolina students and trainees increased from 105 in 1963 ($120,900) to 117 ($136,000) in 1964

Academy of Psychosomatic Medicine

The annual meeting of the Academy of Psychosomatic Medicine will be held in Chicago, Oct. 11-13, 1965. Since these sessions will overlap with those of the American Society of Clinical Hypnosis, the two groups will hold a joint morning meeting and luncheon on Oct. 11. Dr. Jules Masserman, professor of psychiatry, Northwestern University School of Medicine, will be the luncheon speaker.

During the Academy's scientific sessions, reports will be presented on psychosomatic problems of children, college students and the aged. Emphasis will also be placed on digestive and eating disorders, heart disease and stomach malignancies. Dr. George R. Pollock, director of the Chicago Institute for Psychoanalysis, will deliver the annual Franz Alexander Memorial Lecture, on Oct. 12.

U. S. Department of Health, Education, and Welfare

A slight change in the composition of influenza vaccine for the 1965-1966 season was announced recently by Dr. Luther L. Terry, Surgeon General of the Public Health Service, U. S. Department of Health, Education, and Welfare.

In addition to the representatives of the four influenza virus strains—A, A_1, A_2, and B—which are used in the current vaccine, next season's formula will include another A_2 strain, isolated in Taiwan in 1964. This strain is closely related to the A_2 strain which has been associated with epidemic influenza during the past season.

The present recommendation for the strain

composition of the vaccine for the 1965-66 season is as follows:

A	PR8	100 CCA
A_1	Ann Arbor/1/57	100 CCA
A_2	Japan/170/62	100 CCA
A_2	Taiwan/1/64	100 CCA
B	Maryland/1/59	200 CCA

"It is clear that we continue to be in a period of antigenic change," Dr. Terry said, "and that examination and analysis of the strains isolated in this country and abroad during the current season, or later in the present year, may call for further recommendations."

Nursing School Admissions Reach Record High in 1964

Adminissions to schools of nursing in the United States rose to an all time high of 92,300 students in 1964, according to an announcement by Fred C. Foy, chairman, Committee on Careers, National League for Nursing, New York. That figure represents an increase of 10,400, or 12.7 percent, over 1963. The rise can be attributed in large part to the post World War II "baby boom," which is expected to bring 63% more college-age students into higher education by 1975, Mr. Foy explained.

The most marked change in nursing was in admissions to the 1,158 programs of professional nursing. These reached an estimated 56,413 for the calendar year 1964, a breakthrough from the plateau-level of 51,000 which has prevailed over the past few years. Of these, the larger number of new students, 38,986, were admitted to three-year diploma schools in hospitals. Second came 11,515 young men and women accepted by four-year baccalaureate programs in colleges and universities. The remaining 5,912 entered two-year junior or community college programs in nursing, which lead to an associate degree.

Lincocin—A Chemical and Clinical Voyage of Discovery

More than a full decade of highly sophisticated research into its structure and activity makes The Upjohn Company's Lincocin one of the most thoroughly investigated antibiotics ever to reach the market.

The new drug, introduced in January to the medical profession, has distinct advantages: It is particularly effective against staphylococci, streptococci, and pneumococci, many of which now resist older antibiotics, and are the cause of such infections as pneumonia, tonsilitis, bronchitis, pharyngitis, sinusitis, osteomyelitis and otitis media.

A major difference between this new drug and other antibiotics is that it can be given with equal facility by mouth or by intramuscular injection. Execpt for procaine penicillin, most other antibiotics cause such pain at the injection site that they must be taken by mouth.

Laboratory and animal tests have been going on for many years. Clinical trials began in 1961. In compilation covering 2,495 cases, physicians reported "good to excellent" results in from 73% to 100%, depending upon the disease or condition treated.

Exceptionally good results have been achieved in patients suffering from abscesses, wound infections, and furunculosis; cellulitis, osteomyelitis, pneumonia, sinusitis, infection of the middle ear, tonsillitis, pharyngitis, and scarlet fever.

The Month in Washington

A Registry of Tissue Reactions to Drugs is being established within the Armed Forces Institute of Pathology (AFIP) through the cooperation of the American Medical Association, the Pharmaceutical Manufacturers Association, and the Food and Drug Administration. [News of this development appeared in the May issue of the JOURNAL—*Ed.*]

Establishment of the Tissue Registry was originally proposed by the Drug Research Board of the National Academy of Sciences-National Research Council. Twenty-eight such Registries already exist as joint activities of the Armed Forces Institute of Pathology and sponsoring professional societies. Collectively, the Registries are known as the American Registry of Pathology.

The parent Armed Forces Institute of Pathology, which is more than 100 years old, serves as a central laboratory of pathology for the Department of Defense and has become a center of research, teaching, and consultation not only for the military but for civilian groups. AFIP offices and laboratories are in an eight-story building at Walter Reed Army Medical Center.

The cost of the Tissue Registry is being borne equally by each of the three sponsors. In its first full calendar year of operation (1966), the cost of operation and administration is expected to be about $100,000. The fund will be administered by the Universities Associated for Research and Education in Pathology, Inc.

In another development in this field, the U. S. delegation proposed at the World

From the Washington Office of the American Medical Association.

Health Organization Assembly in Geneva, Switzerland, that there be a worldwide warning system against drugs with adverse effects.

In commending the proposal, which was recommended by the HEW department, President Johnson said:

"The expansion of this into an international system would be of direct benefit to the American people since it would include the monitoring of adverse reactions throughout the world.

"This is one of the many instances in international technological cooperation where everybody gains and no one loses."

* * *

Congress has approved legislation authorizing more than $100 million to finance a three-year extension of a program of federal aid to community health services, including immunization programs against polio and measles.

The American Medical Association supported the provisions for immunization programs and most other features of the legislation.

Included in $11 million a year earmarked for immunization is a new program to innoculate 20 million pre-school children against measles. Aid to states and local communities for immunization programs against polio, diphtheria, tetanus and pertussis also will continue.

Other features of the legislation are:

—$3 million a year for a program of health services for domestic migrant workers and their families.

—$50 million to continue for one more year a program of general federal aid to communities to enable them to establish and maintain adequate public health service.

—$10 million to continue for one more year a program of federal grants designed to encourage the development of new or improved methods of providing health services outside the hospital.

The House Commerce Committee extended the last two features for only one year because they are both under review by the public health services with a view toward possible changes.

Wilbur J. Cohen, a longtime advocate of health care for the aged under social security, has been promoted to Under Secretary of Health, Education and Welfare.

Cohen, 51, has been Assistant HEW Secretary for legislation since 1961. The post made him the Administration's chief lobbyist for medicare. At one time, he was director of the social security research and statistics division.

He succeedes Ivan A. Nestingen, who resigned.

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In Memoriam

Margaret Alford Barnes, M.D.
April 15, 1913-March 21, 1965

The Mecklenburg County Medical Society lost one of its most respected and best loved members on March 21, 1965, in the untimely death of Margaret Alford Barnes.

Dr. Barnes was born in Roanoke, Virginia, on April 15, 1913, but soon moved with her family to Buffalo, New York. There she graduated from high school and attended the University of Buffalo. She continued her education at Roanoke College and, later, graduated from the University of Virginia with a degree in education, this being the only undergraduate department in the University which would accept women. She continued her studies as a graduate student in the Miller School of Biology of the University of Virginia to complete the requirements for entrance into the medical school. While receiving her medical education she met and married James C. Barnes.

She graduated from the School of Medicine of the University of Virginia in 1943. In the following year she served her internship at Charlotte Memorial Hospital after which she practiced for a short time with the late Dr. Graham Reid. After a leave of absence for the birth of her first child, she served a preceptorship, followed by an association in practice with Dr. Jasper S. Hunt. She opened her own office for the practice of pediatrics in 1954.

Dr. Barnes was past vice-president of the Mecklenburg County Medical Society and past president of the Charlotte Pediatric Society. She was a member of the Charlotte Pediatric Society, North Carolina Pediatric Society, county and state medical societies, and the American Medical Association.

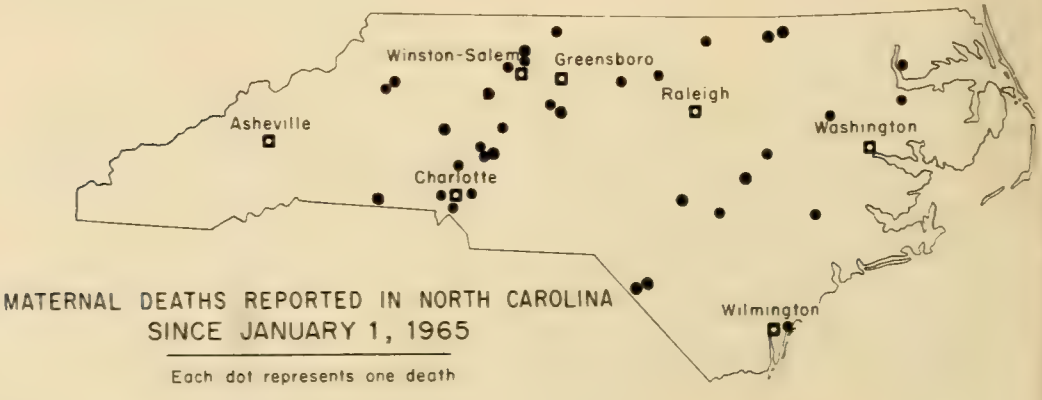
She was a member of the Covenant Presbyterian Church, where she served on the education committee, taught an adult Sunday School class, and was active in the youth work of the church. She was a member of the Board of Directors of the Alexander Children's Home and held offices in the American Association of University Women. For several years she was on the Board of the YWCA. She was an active participant in the PTA, particularly in the field of sex education.

Her busy professional and community activities in no way detracted from her life as a loyal and devoted wife, and a most successful mother to her three children; James, Jr., a student at Davidson College; Margaret Ann, a high school senior; and William, in grade school.

Margaret Alford Barnes exemplified the finest qualities of the physician. To her profession she gave devotion and dedication; to her patients, care and kindness; to the parents, comfort and council; to the community, substance and service; and to her friends, warmth and fullness of spirit. She was a gentle woman who lent an air of grace and femininity to all with whom she associated. Margaret Barnes will be missed by the Medical Society and her community.

Be it **resolved,** That these expressions of our love and respect be recorded in the minutes of the Mcklenburg County Medical Society and the North Carolina State Medical Society, and that a copy be sent to her family.

Mary Lou Rutledge, M.D.
Fred N. Mitchell, M.D.
Harvey Craig, M.D.



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NORTH CAROLINA

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IN THIS ISSUE:

Rabies—A New Look at an Old Problem
Samuel T. Bickley, D.V.M., M.D.

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Rabies—Recent Advances in Diagnosis and Prophylaxis

SAMUEL T. BICKLEY, D.V.M., M.D.

YADKINVILLE

Historically, rabies is one of the oldest diseases known to man, and the dog was the first animal in which its depredations were recognized as those of a specific entity. It was mentioned in the pre-Mosaic codes of biblical peoples, and an allusion to canine madness in the *Iliad* has indicated to medical historians that rabies may have been known to the Mediterranean world as early as the tenth century B.C. The fifth century Greek philosopher and teacher of Hippocrates, Democritus, was probably aware of its existence. Aristotle, about 355-322 B.C., set down the first explicit reference to the disease in his *Historia Animalium*: "Dogs suffer from three diseases: lyssa, quinsy, and sore feet." Lyssa is a transliteration of Greek letters meaning "frenzy," and is the name by which rabies was originally known. The Romans gave the disease its modern name, derived from *rabere*, meaning to rage, and the term has been in common usage since the first Christian century.

Historical Background

In 100 B.C. Celsus recognized the relationship of animal bites to rabies in man. In his classic *De Medicina*, he challenged Aristotle's statement that "the diseases is fatal to any animal, man excepted." However, Celsus, like Aristotle, felt that the disease could be mastered, and proposed the still valid preventive technique of wound cauterization. He also proposed an antidote consisting of some 30 herbal ingredients, and a treatment consisting of water and oil baths should the former measures fail.

Celsus' erroneous concept that rabies in man need not be fatal was unchallenged for 1500 years, and even Galen was unable to contribute more than a revised definition of the disease that failed to diminish the confusion evoked by the myriad of herbs and superstitions which composed the medicinal treatment of the era.

After the canonization of Greco-Roman medicine the subject was considered closed,

For editorial comment see page 298

and it was not until 1546 that Hieronymus Fracastorius, in "Contagions, and Contagious Diseases and Their Treatment," announced that rabies was an infectious disease, always communicated by the injection of saliva into the blood and always irremediably fatal. This concept, despite the influence of Fracastorius's followers, was short-lived, and within a generation the classic concept of Celsus had reappeared. The ducking stool of Celsus, the wormwood of Rufus, and the hippocampus ashes of Dioscorides were again in vogue and were to remain so throughout the next 300 years. In 1806 J. M. Crous of New York advocated a cure composed of dog's jawbone, colt's false tongue, and corroded copper from an English penny of the reign of George I. Numerous equally dubious remedies were advocated throughout the 1880's, and as late as 1879 the "madstone" (concretions of mineral salts formed in the stomachs of herbivorous animals) was applied to the wound[29].

In 1880 Louis Pasteur conceived the idea of prophylaxis against rabies and by 1883 had produced a stable strain of an attenuated virus with which he was able to immunize dogs not only before bite but, if undertaken promptly, even after exposure[28]. July, 1885, he treated the first human patient, S. Maisler—who had been severely bitten by a rabid dog—with 13 inoculations of the crude vaccine prepared from dried in-

fected spinal cord of rabbit. In October, 1885, Pasteur presented a paper entitled *"Methode pour Prevenir la Rage Apres Morsure,"* at a meeting of the *Academie des Sciences* in Paris. This met with instant and appreciative recognition in the medical world.

With Pasteur's epochal discovery that the virulence of a micro-organism could be attentuated without affecting its capacity to stimulate antibody production in the host came the genesis of subsequent developments relating to the management of the problem, which are to be discussed in this paper[29].

Etiology

Rabies is caused by a medium-sized neurotropic virus found in the brain, salivary glands, and saliva of rabid animals. It is easily killed by heat, drying, sunlight, ultraviolet irradiation, and such disinfectants as formaldehyde, bichloride of mercury, strong acids and bases, and cationic detergents[39]. The term "fixed virus" has been applied to strains of the virus that have been propagated by serial intracerebral passage in some experimental animals in which the incubation period has become short and constant. The canine "street virus," in the natural state, however, is characterized by a long and extremely variable period of incubation, and is capable of infecting animals upon peripheral inoculation, whereas the fixed virus is transmissible only by intracerebral inoculation[15].

Transmission and Pathogenesis

Actual transmission from animal to animal, and from animal to man, is almost always by contamination of a penetrating bite wound by infective saliva. In order to multiply and produce acute infection, the virus must be introduced into the tissues, where transmission depends upon the ability of the virus to reach and multiply in the salivary glands[15]. The saliva of about 75% of dogs and 87% of foxes contain virus at the time that clinical symptoms develop in these animals[28, 38]. The virus may be present in the pancreas, kidney, breast, lacrimal glands and brain as well as in the salivary glands. The ability of the virus to invade the salivary glands and central nervous system varies with the strain of virus and the resistance of the host. The virus of dogs is highly neurotropic compared to that of the bat, as evidenced by the development of asymptomatic salivary gland infections in bats[15].

Rabies virus is not transmitted by insects or arthropods; it does not penetrate the intact skin and only with difficulty the mucous membranes[15]. Experimental evidence has shown that penetration of the nasal mucosa can occur in chickens, rabbits, and white mice—the virus being regularly detected in central-nervous-system tissue and salivary glands, occasionally as early as three to seven days after artificial infection, and sometimes in the nasal mucosa of apparently healthy animals from one to two months after exposure[34]. It apparently does not penetrate the placenta[40], it is very doubtful if it can penetrate or be absorbed from the gastrointestinal tract[18, 40], and it is not found in the milk of rabid cows[43].

Whether or not infection by the rabies virus develops in a person depends upon several factors, including the following:

1. The saliva may not be infective at the time of the bite.

2. Protection may be provided by clothing and prophylactic measures such as washing and cleansing the wound following exposure.

3. The virus, peculiar to its natural source, may be less infectious for man.

4. The mode of attack, extent, and location of the bite are significant. Parts of the body such as the head, neck and hands, having a rich blood supply, are particularly susceptible.

5. The age of the patient affects the result. Younger persons are thought to be more susceptible and have greater opportunity for severe exposures.

6. The lability of the organism is important. Exposure to normal atmospheric conditions reduces the likelihood of infection by indirect means such as by contaminated objects or fomites[15, 38].

The important animal vectors of rabies are of two epidemiologic types: (1) the sylvatic or campestral, occurring in wildlife;

and (2) the domestic, seen in dogs. During the past ten years the number of cases in wild animals has doubled, and during the past five to seven years 20% of human deaths have resulted from the bites of these animals, most commonly foxes and skunks.

The most recent development in this connection was the finding of rabies in insectivorous bats in the United States in June, 1953[38], when the virus was isolated from a yellow bat that had bitten a child near Tampa, Florida[39]. By the end of the summer of 1960, bat rabies had been reported in at least 30 states, representing all geographic and topographic areas of the country with the exception of the extreme Northeast. Of a total of more than 450 cases, at least 75 involved bites in human beings. At least 18 species of insectivorous bats have been implicated, and a reservoir of rabies in such bats is now recognized.

Investigations are now being conducted to determine the epidemiologic significance of bat rabies problems, one of which is the asymptomatic transmission of the disease in insectivorous species, such as is known to occur in vampire bats. Preliminary studies indicate that this is the case, but this evidence must be corroborated by tests demonstrating the continuous yield of salivary virus from clinically normal bats over long periods[39].

Diagnosis

The diagnosis of rabies in both human beings and animals involves consideration of the following factors: (1) history of exposure; (b) clinical signs and symptoms including course, treatment, and termination; and (c) laboratory findings. Of these, only positive laboratory findings provide a definitive basis for diagnosis, whereas that based upon history or clinical signs or both is merely presumptive.

Clinical diagnosis in the dog

In that rabies in man is always the result of accidental infection from some lower animal, most commonly the dog; and in that the great majority of bites result from contact with non-rabid dogs, it is highly important to the physician that the biting animal be confined and observed for at least ten days by a veterinarian.

The incubation period of the street virus is variable: in dogs usually from 20 to 60 days, though they have been known to manifest the disease as early as ten and as late as eight months after exposure. Dogs are known to emit virus in the saliva only in the latter two or three days of the incubation period, prior to the development of symptoms; and if the animal is infective at the time of the bite, symptoms will develop within seven days[31]. It is most important that the captured animal be allowed to die a natural death if he has rabies, in order to increase the chances of developing the characteristic Negri bodies in the brain[36].

In dogs, the disease is either of the "furious type," marked by excitability, or the "dumb" type, in which paralysis develops early[30]. "Dumb rabies," constituting from 15% to 20% of all cases, is characterized by paralysis of the mandibular muscles and drooling of saliva as the result of pharyngeal paralysis, which may be preceded by lethargy or restlessness and a tendency to seclusion. The animal is usually quiet, unable to eat or drink, and does not respond to provocation; and, as the paralysis is extended, death usually ensues by the third or fourth day. The symptoms of drooling lead lay persons to suspect and try to locate obstruction in the throat of the rabid animal. These attempts may result in contamination of pre-existing wounds on the hands of the examiner.

In furious rabies, the initial symptoms consist of changes in disposition, such as restlessness, irritability, and excitability, and the animal begins to exhibit symptoms of alternating excitement and calmness. Soon the restlessness becomes marked; he is constantly in motion and may become destructive. The voice is modified into a prolonged bark or cry, with succeeding short barks. This is not a constant symptom, however, and many dogs remain quiet.

When progression of the disease leads to

the symptoms characteristic of furious rabies, excitement is marked. The dog attacks objects and cages, and will swallow foreign objects. He tends to wander, attacking objects or animals in his way, and may travel long distances. As paralysis ensues, constriction of the pharyngeal muscles becomes impossible, and inability to swallow results in drooling. Paralysis of skeletal muscles begins in the hind legs and becomes general. General paralysis and coma ensue, and the animal usually dies within four to five days —occasionally 16 days—from onset[43].

The clinical diagnosis of rabies should be made, if at all possible, by the veterinarian and at times may be the only criterion by which the physician can determine whether to initiate treatment in the exposed patient.

Clinical diagnosis in man

In man, the incubation period of rabies varies from as short as ten days to as long as seven or more months. In about 80% of cases it has ranged from 3 to 12 weeks, rarely less than 15 days or more than 7 months.

The onset of symptoms follows a two- to four-day prodrome of malaise, anorexia, headache, and fever. It is usually during or shortly after this period that one of the earliest and most diagnostic symptoms of rabies may appear in the form of some abnormal sensation at the site of the bite.

The excitement phase begins with signs of central-nervous-system stimulation, such as insomnia, restlessness, hyperesthesia, and psychic manifestation of terror and rage. Frequently there is an increase in motor excitation leading to enhanced muscle tone, increased gag and corneal reflexes, and spasmodic contraction of the muscles of deglutition. Intense spasm of the pharyngeal muscles may occur (sometimes stimulated by the mere thought of drinking water), leading to an intense fear of swallowing water (hydrophobia)[15]. In man, these spasms constitute the most distressing feature of the disease and the most significant diagnostic symptom.

Convulsive attacks of the muscles of deglutition and respiration are followed by general muscular convulsions which increase in intensity, and death from asphyxia may occur. On the other hand convulsive attacks may give way to a paralytic-type syndrome. The course of this form of the disease is that of an acute ascending paralysis involving the sphincters and muscles of the trunk, and ending in death by paralysis of the respiratory muscles or cardiac syncope[19]. There is no known case of recovery from rabies in man[15] after symptoms have appeared.

History of exposure

Rabies can be transmitted from rabid animals to man only by direct inoculation of fresh saliva through the skin, deep enough to come in contact with nerve tissue. Such bites or licks constitute a *direct exposure*. All other exposures are *indirect* and should be disregarded except in cases of children unable to describe the origin of a suspected animal bite or the degree of contamination of a pre-existing open wound[30].

Laboratory and Microscopic Diagnosis

A diagnosis of rabies based solely on history of exposure, clinical signs, or a combination of both can be only presumptive; positive laboratory findings provide the only definitive basis for diagnosis.

Microscopic

The routine laboratory diagnosis of the disease is usually based on the postmortem microscopic demonstration of Negri bodies in the central-nervous-system cells (hippocampus major, cerebral cortex, and cerebellum) of the suspected animal, or in laboratory animals inoculated with infective material from the brain of the suspect. Negri bodies, discovered by Adelchi Negri in 1903, are specific for rabies and are sufficient proof of the disease, but their absence does not preclude the diagnosis. With Sellers' stain, the Negri bodies are seen as acidophilic inclusion bodies, usually from .24 to .27 microns in size and containing from 1 to 20 basophilic granules, 2 to 5 microns in size.

The inclusion bodies are usually round but may assume any shape. They usually stand out sharply, the matrix being pink to purplish-pink with dark blue to black inner granules. The cytoplasm of neurons stains a purplish blue, with more deeply blue nuclei and nucleoli, and the stroma is rose-pink. The results of surveys show that in routine specimens, some 10 to 15% of cases proved positive by biologic tests were missed by this microscopic examination; and it is essential to distinguish between Negri bodies and other types of inclusion bodies sometimes found in animal brains. The following outline is useful in the differential diagnosis:

Negri Bodies	*Non-Rabies Inclusion Bodies*
Presence of basophilic inner granules	Absence of internal structure
Heterogenous matrix	Homogeneous matrix
Less refractile	More highly refractile
Blue-red tinge	More acidophilic (pinker color)

In certain animals (cats, deer, hares, and white mice), inclusion bodies have been reported (using Seller's crush preparation) in which an internal structure was lacking[26].

Since the development, presence, size, and abundance of Negri bodies may be related to the length of clinical illness, the disease should be allowed to run its full course if possible. This will permit observation for clinical diagnosis and improve chances of obtaining a positive laboratory diagnosis.

Biologic tests

If the results of microscopic examination are negative or doubtful, animal inoculation tests, using the Swiss Webster strain of mice, should be done to establish or rule out the diagnosis of rabies. The virus may be isolated by sterile technique from pooled small sections of various parts of the brain or from the salivary glands or both. Intracerebral inoculation of mice under sterile conditions with the tissue suspension is done, using from four to five mice for each suspension. The mice are sacrificed for examination beginning with the fifth day and at intervals thereafter, in order to establish an early diagnosis in cases with long incubation periods or on specimens with low concentrations of virus. Rarely will signs of illness be seen before the fifth or after the twenty-first day; however, demonstration of Negri bodies in the brains of affected mice is proof that the signs and symptoms noted are those of rabies as distinguished from other diseases[36].

Improved techniques

In recent years techniques have been developed that will allow more rapid laboratory diagnosis of rabies. The complement fixation test using antigen emulsions of brain and salivary glands of suspected animals, and antibodies from the sera of guinea pigs inoculated with several strains of street and fixed virus, have been used with dependable results in the great majority of cases[24]. This method is thought by some investigators to give approximately the same results as animal inoculation tests but to make possible an earlier diagnosis[3]. The results are obtained within 24 hours, especially in Negri-negative cases; whereas final confirmation by virus inoculation techniques requires from 8 to 12 days. Apparently with this method, false-positive (nonspecific positive reactions) reactions are rare[32], but it does not detect cases in the incubation period[3]. Other investigators do not consider this method as reliable as conventional techniques such as Seller's crush preparation and mouse inoculation tests[6].

In 1958 Goldwater and Kissling[9] reported the technique of fluorescent antibody-staining of street and fixed virus antigen as a diagnostic technique, combining the speed of histologic techniques with the accuracy of biologic examination[9]. This technique has been successfully used to demonstrate rabies virus antigens in both brain and salivary tissue of naturally and experimentally infected animals[10]. These studies indicate that the inclusion bodies of rabies (Negri bodies) contain concentrations of the viral antigens, which seem to be distributed dif-

fusely throughout the Negri bodies rather than restricted to the inner granules. Other small eosinophilic inclusion bodies often seen in the brains of infected animals not generally considered to be of rabies viral origin, were also thus identified. It is possible to demonstrate specific staining of both fixed and street virus of rabies which did not form Negri bodies. Excellent staining of antibodies derived from antisera of human beings immunized with rabies vaccine suggested the possibility of utilizing this technique for studying the development of immunity in persons or animals undergoing treatment (rabies vaccination)[9] or in previously immunized persons.

Subsequent investigations of the use of antibody-staining techniques in the diagnosis of rabies were continued, using antirabies serum of equine origin (Lederle) for producing conjugates (diluted in isotonic saline, nine parts to one part buffer). This mixture was chilled and fluorescein isothiocyanate 1-20 mg protein content added. In a field study conducted in Alabama in 1958, specimens submitted for rabies examination to the Alabama State Board of Health were examined for Negri bodies at the laboratory receiving the specimen; and portions of brain and salivary glands were submitted in glycerol for viral isolation at the Communicable Diseases Center Virus and Central State laboratories. Other portions of the salivary glands were used to make smears. These smears were fixed by the method of Goldwater and Kissling[10] and stained by the method of Coons and Kaplan. They were incubated at 37 C for 30 minutes on a wet chamber, washed for 10 minutes in two changes of buffered saline, dried, and mounted in saline. Microscopy was carried out, using a 40x fluorite oil immersion objective NA 1.0 without funnel stop, and a 10x ocular with a Wratten 2B or Corning 3-73 glass filter. The light source was a Reichert Fluorex lamp with a 5840 Corning glass filter.

The microscopic results showed a considerable variation in the appearance of the rabies antigens as well as in background material. The antigens ranged in size from minute stippling to particles about 6 to 8 microns in diameter. Frequently they were in the form of fine strands, fairly well oriented in any one field. In this study, when specimens from 100 dogs, 10 cats, 5 foxes, 2 pigs, 2 cows, 1 squirrel, and 1 rat, were studied by this technique, results were negative in all 94 non-rabid animals. In specimens from rabid animals a lack of uniformity of distribution was noted in the salivary glands, but when six slides were made from each gland, all glands from which the virus had been isolated except one yielded positive findings, and in this one only two of five mice inoculated developed rabies. False-positive results were rare (1:300), and this one may have been a technical error.

These results indicate that with sufficient care and experience, fluorescent antibody techniques can be used with considerable speed and accuracy for determining the presence of rabies virus in salivary gland as well as brain impression smears.

Etchebarne and associates[7] report that the gamma-2-globulin of horse sera from hyperimmune horses in combination with fluorescein isocyanate is a satisfactory conjugate for staining rabies virus antigens in the brains of infected animals. They report specific staining in all brain smears from rabid animals, while there was no staining of those from animals proved negative by routine methods. One case that was reported negative by rapid microscopic examination for Negri bodies gave a positive result with specific staining by this technique and was confirmed by animal inoculation. These investigators emphasize the value of this method for routine use, especially in Negri-body-negative animals.

When properly executed, this method establishes a highly specific diagnosis on test specimens within a few hours—usually five hours from submission of the specimen to a final report. It must be emphasized that exacting standards of performance, equipment, and reagents are necessary, and these are related, among other factors, to the training and proficiency of the diagnostician[44].

Table 1
Reported Incidence of Rabies in the United States—1938-1959

Year	Dogs	Cattle	Horses	Sheep	Swine	Cats	Goats	Misc.	Man	Total
1938	8,452	413	32	164	42	207	11	44	47	9,412
1939	7,386	358	36	17	38	269	10	172	30	8,316
1940	6,194	326	25	53	71	260	4	277	28	7,238
1941	6,648	418	39	68	159	294	9	212	30	7,877
1942	6,332	288	15	48	32	250	12	160	28	7,165
1943	8,515	349	35	45	60	316	19	310	41	9,690
1944	9,067	561	32	40	43	419	14	311	53	10,540
1945	8,505	487	46	11	30	466	10	373	35	9,963
1946	8,384	962	44	15	22	455	12	956	22	10,872
1947	6,949	766	40	15	20	393	9	728	26	8,946
1948	6,610	599	34	14	36	378	5	819	13	8,508
1949	5,237	639	24	22	54	413	6	1,192	10	7,597
1950	4,979	948	33	48	85	428	5	1,375	9	7,910
1951	5,194	821	34	35	53	480	4	1,387	14	8,022
1952	5,261	916	38	19	31	486	7	1,674	21	8,453
1953	5,688	1,012	21	42	38	538	5	1,479	14	8,837
1954	4,083	930	29	23	40	462	10	1,697	8	7,282
1955	2,657	835	33	18	30	343	8	1,915	5	5,844
1956	2,592	700	30	22	30	371	12	2,079	10	5,846
1957	1,908	654	24	13	16	386	12	1,989	6	5,008
1958	1,643	660	31	22	20	353	4	2,075	6	4,814
1959	1,124	700	22	8	18	310	4	1,295	6	4,117
TOTAL:	123,408	14,342	697	762	968	8,277	192	23,149	462	172,257

Rabies Control in the Animal Population

Examination of the epidemiology of rabies reveals that it is ubiquitous in character, it is not influenced by climate or season, and its occurrence in domestic and other animals, including bats, is a major problem. Of primary concern is the resultant exposure of human beings to this disease, the majority of cases being due to contact with rabid domestic animals.

There can be no question that the ultimate solution to the problem of rabies in man is predicated upon the control and eventual elimination of the disease from the wild animal population and protection of susceptible domestic animals. These objectives may be achieved by setting up transmission barriers such as animal immunization, control or eradication of stray dogs, reduction of excessive wildlife vectors, and a continuous, positive program of public education.

The reported incidence of rabies in the United States in the years 1938-1959 is shown in Table 1. The reported incidence in North Carolina from 1934 through 1964 is shown in Table 2.

It is a well established premise that coordination is the keynote of a successful campaign, which should be administered by a qualified public health veterinarian at the state level. Local programs are best organized on the county level and under health department and veterinary medical auspices, and should utilize all the technical resources in the community. Such programs should include the following basic activities:

1. Mass immunization of dogs. In an outbreak at least 70% of the entire canine population should be immunized within a two to three weeks' period.

2. Elimination of all unimmunized dogs.

3. Reduction of excesses of wildlife vectors. For example, outbreaks occur in overpopulated species, especially foxes and skunks.

4. An energetic and continuing publicity campaign. This is essential to any effort both local and state[49].

Since Pasteur and his associates first immunized dogs against rabies in 1884, the search for more effective and less dangerous immunizing agents has continued. Many agents containing inactivated virus have

Table 2

Rabies in North Carolina 1934-1964

Positive Rabies in Animals by Month

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1934	43	45	74	72	85	68	56	76	67	72	61	96	815
1935	107	108	148	107	108	81	87	69	61	41	44	46	1007
1936	53	52	57	58	45	41	50	41	30	24	20	30	501
1937	36	26	33	33	41	31	15	28	28	29	23	40	363
1938	22	38	31	21	26	25	30	21	19	13	23	22	291
1939	21	22	33	32	31	18	12	25	18	16	17	18	263
1940	15	22	33	34	39	19	34	22	23	23	30	41	335
1941	30	33	42	45	45	28	32	37	25	18	13	17	365
1942	21	23	25	27	23	15	8	7	7	13	12	13	194
1943	19	19	16	26	21	7	15	13	15	22	27	24	224
1944	18	32	40	27	30	32	23	19	15	23	7	17	283
1945	21	23	37	36	24	19	19	23	7	15	19	20	263
1946	21	20	32	41	35	27	28	22	30	24	21	19	320
1947	27	41	34	42	34	33	25	22	19	18	23	25	343
1948	32	27	49	39	21	22	16	31	22	18	21	15	313
1949	22	19	31	32	34	25	25	16	16	23	27	20	290
1950	14	21	28	14	23	15	10	14	16	11	6	10	182
1951	25	36	26	21	23	19	22	21	11	14	14	15	249
1952	14	11	16	13	17	12	9	8	5	9	6	13	178
1953	12	13	11	11	13	5	7	7	7	17	13	11	173
1954	14	10	23	15	16	14	19	12	11	16	14	10	208
1955	11	14	17	14	15	12	10	8	10	4	3	6	161
1956	7	9	5	3	8	3	2	1	4	0	4	3	61
1957	6	10	5	9	10	3	5	4	4	3	1	1	81
1958	1	4	—	3	1	—	1	2	1	1	—	2	37
1959	1	7	6	8	10	2	3	1	—	6	2	—	59
1960	4	3	1	—	—	3	—	—	—	—	—	—	19
1961	1	1	—	2	1	3	1	1	2	1	—	—	14
1963	2	2	—	—	—	1	1	4	3	1	1	—	15*
1964	1	1	—	—	3	—	1	—	—	—	—	—	6†

Please Note:

In the years prior to 1951 before the Veterinary Public Health Section was established there were four laboratories in the cities of Asheville, Charlotte, Durham and Winston-Salem that conducted rabies examinations. During these years, 1934-1951, these laboratories examined numerous animal heads, many of which were positive. The State Board of Health Laboratory requested the statistics from these 4 laboratories each year but it is not certain that the positives and negatives from these sources have been included in these charts. However, since 1951 only one local laboratory has been operating in this area, other than the State Laboratory, and the figures from the local laboratory are included from 1951-1961 and are accurate.

* 10 bats, 5 foxes

† 3 foxes, 2 bats, 1 dog

been used extensively. Phenolized vaccine (Ferni) was used widely in animals before its adoption for use in human beings. This vaccine was used to immunize dogs by a single-injection technique, and after modification by Schoening was adopted by many health departments.

Kelser's chloroform-inactivated vaccine and those of Hodes, Habel, and others inactivated by ultraviolet light were tested to demonstrate their possibilities as immunizing agents. These vaccines have a number of neurologic-type reactions, usually exhibited as post-vaccinal paralysis which may be mild and transient or fatal. A rather limited duration of immunity is conferred by a single injection of inactivated virus—commonly about one year.

The most significant advance in the progress of recent years has been the development of a modified live virus vaccine (Flury strain) grown in the chick embryo, which has proved to be a significantly superior vaccine for periods of at least four years between vaccinations and exposure. Its efficacy has been demonstrated many times

under experimental and actual field experience in mass immunization of dogs and cats (Flury LEP), and in cattle (Flury HEP)[16].

Prophylaxis and Treatment

It has been emphasized heretofore that any long-range program aimed at the eradication of rabies as a public health problem is actually a veterinary, medical and wildlife problem, in that man represents the accidental host, in the ecology of the disease.

The prophylactic use of vaccines and antirabic serum against rabies in animals and man during the postexposure state is unique in medical practice, in that an attempt is made to produce immunity after exposure has occurred. This is possibly only because the incubation period is relatively long (from 20 to 90 days in the majority of cases). However, with the advent of safer vaccines, prophylaxis in the occupational hazard field is now feasible.

It is of paramount importance to establish whether or not exposure has actually occurred. The first problem in a medical situation involving rabies is actually a veterinary problem involving the diagnosis of the clinical disease in the biting animal. Apprehension, identification, and clinical observation of the animal for at least 10 days is vital. If the animal has been killed or has died, appropriate laboratory studies to determine the possibility of rabies must be undertaken at once[12].

Sellers[31] has stated that two primary responsibilities face the physician in the management of exposures. The first is appropriate definitive therapy for those with a break in the skin produced by the teeth of a known rabid or suspected animal. The second is the management of the psychologic problem of "rabiphobia," whose victims far outnumber those actually in need of protection. Circumstances of exposure so remote as to make the possibility of infection appear unlikely to the physician may cause the uninformed public great apprehension and mental anguish[31]. The physician must be aware that the Pasteur vaccine is potentially dangerous, and when administered to persons not definitely exposed, has caused more deaths than rabies *per se*. He must, therefore, determine whether or not exposure has in fact taken place.

The animal should be considered potentially infectious if (1) it is clinically rabid, (2) results of laboratory tests are positive, (3) the animal bites without provocation and is killed immediately even though laboratory findings are negative; (4) the animal cannot be identified or disappears; or (5) if the animal dies of unknown causes, without laboratory examination, within ten days.

Once it is established that the animal in question is rabid or that rabies cannot be ruled out, one must decide whether antirabic treatment is indicated or not. In general, treatment is *indicated if* (1) there are visible wounds penetrating the skin known or suspected to have been inflicted by the animal in question; (2) the wounds were made through clothing torn by the teeth of the animal when there is reason to suspect direct contact of wet saliva with fresh, open, or raw pre-existent abrasions; (3) the patient is a small child, unable to give reliable testimony. It is generally assumed that children under five years of age are more susceptible than adults.

Treatment is generally contraindicated when exposure is limited (1) to intact skin, (2) to scabbed over or pre-existing wounds over 24 hours old, (3) to bruises or wounds through intact clothing, (4) to petting or handling animals, (5) to handling fomites contaminated by infected animals, (6) to drinking milk from infected animals, (7) or when at least seven days have elapsed between exposure and detection of signs of disease in animal, or when animal remains normal for as long as one week.

When Rabies Cannot Be Ruled Out

Local treatment of the bite wound is the first consideration in the human after exposure. This initial procedure should be carried out routinely whether the question of rabies is involved or not. The sooner treatment is applied after exposure, the better

the chances of eliminating the virus from the wound. Free bleeding should be encouraged without trauma, followed by thorough cleansing with adequate amounts of soap and water or detergents. Vigorous application of soapy water, detergents, or Zephiran chloride (1:1000) with a syringe and small rubber catheter is recommended. Fuming nitric acid is to condemned as a cleansing agent, as it is corrosive, injures the tissue, and may so aid the infiltration of the virus into the tissue. It has been demonstrated recently that infiltration of the wound site with hyperimmune antirabies serum, usually not less than 5 ml, increases the over-all effectiveness of treatment.

In addition to such specific measures, surgical debridement, tetanus prophylaxis, and antibacterial therapy in case of infection are indicated[12]. Primary closure of the wound is not recommended, since there is evidence that it may contribute to the development of rabies[31]. An outline of treatment in man is shown in Table 3.

Antirabic Vaccines

The use of antirabic vaccines to stimulate the development of immunity in the post-exposure state is commonly known as the "Pasteur treatment." The vaccines are prepared from whole, unpurified, heavy suspensions of the brain and/or spinal cords of laboratory animals infected with rabies virus and inactivated by chemicals (phenol, formaldehyde, or chloroform) or ultraviolet light. These vaccines contain the virus, which acts as an antigen to produce an active type of immunity. During the relatively long incubation period, enough active immunity is produced to overcome the virus before it can invade the central nervous system.

These vaccines (Harris, Semple, and Fermi types) are the crudest of all biologic products for parenteral use in man, and are not without danger[12, 31]. As they are prepared from the tissues of foreign species (other than those of the recipient) and as repeated doses are given, virtually all persons so treated develop some sensitivity during the course of injections. This may be limited to local reactions at the site of inoculation or may assume the form of erythema or large indurated swellings, usually painful, in some or all of the sites. Another more general reaction, based on sensitivity to species-specific protein, occurs more often in persons who have previously received the vaccine.

The most severe complication associated with these agents is based upon the development of organ-specific sensitivity. These complications, known as neuroparalytic accidents, iso-allergic encephalitis, post-vaccinal paralysis, or post-vaccinal encephalomyelitis, are due to the development of hypersensitivity to the brain tissue contained in the vaccine, primarily to myelin, leading to demyelination of the patient's own central nervous system and death in 15 to 20% of the cases in which it occurs[12, 21, 48].

Neuroparalytic accidents are classified into three clinical groups: (1) acute ascending Landry's paralysis, (2) dorsolumbar transverse myelitis, and (3) peripheral neuritis. There is an average mortality of 30% in the first, 5% in the second, and none in the third. In survivors there are generally few neurologic sequelae[12].

In support of the view that these complications are the result of an allergic response with a tissue-specific hypersensitivity, anti-brain antibodies have been demonstrated in animals injected with brain substance[18], and in many receiving these vaccines[17]. The incidence of neuroparalytic accidents in the United States following the use of the Pasteur-type vaccines has been reported to be as great as 1:500-600 to as low as 1:7000 immunizations,[20, 31] and it is significant that in many of these cases a history of other allergic diseases is found.

Immunization of Man with Modified Live Virus Vaccine

The success attained in immunization of animals by the use of a modified live virus vaccine, Flury strain, grown in chick embryos and attentuated by serial passage in eggs (low egg passage, 50 passages; high egg passage, 176-182 passages HEP)[42], and

Table 3
Rabies—Treatment of Man
Excerpt from the Third Report of WHO Expert Committee on Rabies
5. Recommendation of Post-Exposure Treatment of Man
5.2 Guide for Specific Post-Exposure Treatment

Nature of Exposure	Condition of Biting Animal		Recommended Treatment (Note: Local Treatment Should Be Given)*
	At Time of Exposure	During Observation Period of 10 Days	
I. No lesion; indirect contact only	rabid	—	none*
II. Licks:			
(1) unabraded skin	rabid	—	none*
(2) abraded skin, scratches and unabraded or abraded mucosa	a) healthy	healthy	none*
		clinical signs of rabies or proven rabid (laboratory)	Start vaccine at first signs of rabies in animal*
	b) healthy	healthy	Start vaccine immediately. Stop treatment if animal is normal on 5th day after exposure*
	c) signs suggestive of rabies	—	Start vaccine immediately*
	d) rabid, killed, escaped or unknown		
III. Bites			
(1) mild exposure	a) healthy	healthy	none*
	b) healthy	clinical signs of rabies or proven rabid (laboratory)	Start vaccine at first sign of rabies*
	c) signs suggestive of rabies	healthy	Start vaccine immediately. Stop treatment if animal is normal on 5th day after exposure*
	d) rabid, escaped, killed or unknown; or any bite by wolf, jackal, fox, etc.	—	Start vaccine immediately*
(2) severe exposure: multiple, or face, head or neck bites	a) healthy	healthy	Serum immediately; no vaccine as long as animal remains normal
	b) healthy	clinical signs of rabies or proven rabid (laboratory)	Serum immediately; start vaccine at first sign of rabies
	c) signs suggestive of rabies	healthy	Serum immediately, followed by vaccine; may be stopped if animal is normal on 5th day after exposure.
	d) rabid, escaped, killed or unknown. Any bite by wild animal		Serum immediately, followed by vaccine

Explanatory Notes to the Guide

It is fully recognized that this table is only a guide and in certain situations specific conditions may warrant modifi-cations, e.g., exposure, especially in young children or where a reliable history cannot be obtained, and particularly in areas where rabies is known to be enzootic even though the animal at the time of exposure is considered to be healthy. Such cases may justify treatment immediately in a modified way. Possible modification would be that, following local treatment of the wound as described above, a single dose of vaccine at daily intervals, and no further vaccine, be given as long as the animal stays healthy for 10 days following exposure.

Another example of a local situation in which a modified interpretation of these recommendations may be indicated is that of rabies-free areas where frequent exposures to animal bites are encountered. In such localities, adequate labora-tory and field experience indicating no infection in the species involved may justify the local health authorities in rec-ommending no specific antirabies treatment.

the well known hazards of demyelinating reactions associated with the Pasteur treatment in human beings stimulated investigators[2, 8, 33, 41] to undertake studies to determine whether or not HEP Flury vaccine could be used to stimulate the production of an active immunity in man[8, 23].

The Flury strain of rabies virus was originally isolated from a fatal human case and carried in brain-to-brain passage in day-old chicks by Dr. H. N. Johnson, and was adapted to grow in the chick embryo by Koprowski and Cox in 1948. By the fiftieth serial egg passage it was sufficiently antivirulent to permit its use in canine immunization, and by the 176-182 passage in bovines. This strain of rabies virus was chosen for initial experimental immunization of man because of its minimal virulence.

Fox and co-workers evaluated the production of antibodies in man, using various courses of HEP Flury vaccine as compared to conventional Harris and Semple type vaccines. He found that with regard to the total percentage of inoculated persons responding and the level of neutralizing antibodies produced, the Flury vaccine did not achieve results equivalent to those of equal numbers[4] of doses of Semple or Harris vaccines; but Flury vaccine was superior in rapidity of response (measured by the tenth day). It was seen that the response to HEP Flury vaccine is due directly to its virus content, which is relatively small compared to conventional vaccines, and that the virus does not multiply in the tissues, accounting for its less potent antigenicity. Three intradermal doses of HEP Flury vaccine were given at five-day intervals in this study, and evoked a lower initial antibody response, but persons so inoculated responded promptly and effectively to a booster dose of the same vaccine[8, 23]. Re-stimulation of immunity by small intradermal inocula was as effective as with larger intramuscular doses; and it was found that following Pasteur treatment, antibodies persist for at least 5 years after a single course, and for more than 25 years after retreatment. In persons with a history of treatment (more than one course) within 20 to 25 years, a single dose of Flury HEP vaccine would stimulate response titers at least equivalent to those usually seen after a full course of Pasteur treatment. It would then appear that previously treated persons need not receive more than a single booster dose on re-exposure, and that the Pasteur treatment does not provide a solid basis for long sustained immunity.

Veeraraghaven[41] found that HEP vaccine experimentally administered alone prior to infection (eight doses at five-day intervals) gave excellent results, though not as good as those of Semple vaccine when combined with hyperimmune serum.

Sharpless, Ruegsegger and others[33] have continued investigation in view of Fox's work and have confirmed his indications as to the feasibility of such a vaccine. They used HEP Flury vaccine for primary immunization of 149 persons, with resulting antibody response in 95%. Using a refined centrifuged preparation of HEP Flury vaccine in 79 subjects in a subsequent series, they achieved 100% antibody response. This response approaches equivalent numbers of injections of Semple vaccine. No general reactions were definitely attributable to the Flury vaccine. Local reactions such as erythema, pruritus, and edema occurred, as well as occasional axillary adenopathy, but were less frequent with the centrifuged HEP Flury vaccine[31].

It is of interest that no neuroparalytic accidents have been reported (in more than 1000 humans and experimental studies in dogs) following the use of HEP Flury vaccine. This attests to its safety and indicates the very definite promise of such vaccines for primary preexposure vaccination of human beings and as a booster in subsequent exposures in persons previously treated.

Immunization in Man Using Duck Embryo Rabies Vaccine

Culbertson and Powell, in 1950, reported the development of fixed rabies virus in high titers in embryonated duck eggs, and later (1959) reported that this source was adequate for the production of a potent antirabies vaccine which would be almost de-

void of encephalomyelitis-producing properties as tested in laboratory animals[5, 25].

In 1955 Peck, Powell, and Culbertson reported that such a vaccine fulfilled the requisites of NIH mouse assay for potency, and published favorable results of clinical trials in 20 human patients as to antibody response. It was noted that no untoward symptoms were seen and that local reactions were mild to this freeze-dried attenuated vaccine using a 14-day series of inoculations[21]. This virus vaccine was later killed with beta-propiolactone (BPL) in a concentration of 1:4000. The vaccine was an effective immunizating agent in experimental animals. Clinical response was studied in 32 persons, and it was found that antibodies were produced in all subjects within 10 days after the initial injection. Injections were made daily for 24 days, and local and general reactions were noted. Local reactions were present in about 50% of the patients. One patient manifested signs of serum sickness, but there were no acute neurologic complications.

From 1955 through 1957 more than 600 patients received antirabic vaccination with duck embryo vaccine at Indianapolis General Hospital. This period included an epizootic outbreak in the summer of 1958. More than 5,000 doses of the vaccine were given to 435 patients, 70 of whom received 1-4 doses, 32 received 5-9 doses, and 333 received 14 doses. Sixty per cent of these patients were under ten years of age. No serious reactions were seen in any of the patients, while local reactions consisting of erythema and induration occurred in some patients, usually between the sixth and ninth days. Serum sickness developed in 13 patients, but in none who had not received either tetanus antitoxin or hyperimmune rabies serum. One patient developed urticaria[23] and was switched to Semple vaccine[23].

In a comparative study of the general and local reactions and antibody titers in 123 patients given Semple vaccine in the rabies clinic of the Health Department of the City of New York, two cases of encephalomyelitis occurred in patients receiving Semple vaccine on the eighth and fourteenth days of treatment. Local reactions to duck embryo were mild, and no cases of encephalomyelitis were seen[11].

A number of severe reactions in man have been subsequently reported in association with the use of duck embryo vaccine, such as transverse myelitis "central-nervous-system syndrome," local neuritis, and acute systemic allergic reactions. In general, however, duck embryo vaccine is less hazardous with regard to neuroparalytic accidents than is nerve tissue vaccine[54].

An early response in antibody titers is seen with duck embryo vaccine[11, 21, 23]. When subcutaneous doses of this vaccine of 1 ml each were given at daily intervals, antibodies appeared by the seventh to tenth day and were present in 73.5 to 100% of patients. However, if only seven doses were given, about 50% of the patients showed antibodies by the tenth day. About 35.4% of those receiving Semple vaccine had antibodies by the tenth day. These studies corroborate earlier reports of the early immunologic response to duck embryo vaccine[21]. Antibody titers from the use of either Semple or duck embryo vaccines are not significantly different from the eleventh to fourteenth days[11].

It is now quite evident that booster effects are readily obtained with the use of any potent vaccine such as HEP Flury, Semple, or duck embryo vaccine[2, 8, 11, 23] in patients who have received previous courses of rabies vaccines, even if as long as 20 years before the booster dose. Booster doses given from six to nine months after the primary course with either type of vaccine will evoke a response higher than those obtained following the primary course[11].

It seems quite clear that even one series of rabies vaccine conditions the patient to respond to booster doses even if the initial course was as much as 20 years prior, and whether or not the patient has demonstrable serum-neutralizing antibodies at the time of revaccination. Two such patients are reported with histories of primary immunization given 19 years and 14 years previously who had no neutralizing antibodies present at the time of booster inoculation,

and who responded with titers of 1:555 and 1:123 respectively to one dose of duck embryo vaccine[11].

Cross sensitization between chicken and duck protein is extremely rare; however, caution must be exercised in administering the duck embryo vaccine to persons known to be allergic to eggs, chickens or chicken feathers. Persons known to be allergic to eggs should be given a test dose of vaccine before each prophylactic injection, and if any allergic manifestations appear, another vaccine such as Semple should be substituted[23, 48].

From the information now available, there is reason to believe that neurologic complications occur less frequently with duck embryo and avian vaccines. The duck embryo vaccine is therefore a decided improvement over the conventional vaccines, and the recommendation that it replace brain tissue vaccines in the prophylaxis of rabies seems to be valid[11].

Prophylaxis by Means of Hyperimmune Rabies Antiserum

A relatively new development in the specific biologic treatment of persons exposed to rabies is the use of hyperimmune serum to provide immediate passive immunity[46].

Theoretically, rabies is the ideal disease for passive immunization, as the clinician usually knows the exact time of exposure, the responsible vector, and the site of exposure. There is a relatively long incubation period and evidence that the virus may be localized at the wound site for some time before it can be demonstrated in the central nervous system[12].

One of the very real problems in the specific treatment of exposed persons has been the ineffectiveness of vaccine in severe bite cases, especially those involving the region of the head and neck, when the incubation period was too short to allow for the development of immuno-specific protection[35]. Convincing experimental evidence in challenge tested laboratory animals, in antibody studies, and in known rabid animals has established the value of hyperimmune serum[2, 23, 41, 48]. Studies on the formation of antibodies in individuals involved in the Iran field studies, and in normal persons placed on various schedules of vaccine and antiserum under the auspices of the World Health Organization, indicate that a single or double dose of antiserum at the start of treatment, followed by 14 to 21 daily doses of rabies vaccine gives a significant level of circulating antibodies continuously from the first day through as many as 50 days[21]. Other studies have demonstrated antibodies from 10 to 20 years following a primary vaccination series [11, 23].

In view of experimental evidence that administration of antiserum suppressed demonstrable active antibody response when given simultaneously, a number of investigations were undertaken to study this facet of the problem. The results of these studies may be summarized as follows: serum alone, given before or after exposure, had no saving effect *per se* but definitely prolonged the incubation period; however, in combination with vaccine it was of great value under certain circumstances. There appears to be an optimal time relationship between serum and vaccine administration—that is, serum within 1 to 72 hours and vaccine after 24 hours; however, combined therapy may be effective as long as six days after exposure[41]. It has been shown that vaccine given after the tenth day may overcome this interference[13]. It may be concluded from these studies that if passive antibodies are maintained by repeated doses of serum for too long a period, there is definite interference with production of active immunity which can be overcome by the use of at least 14 or more doses of vaccine[13]. It is therefore recommended that in severely exposed persons a single dose of hyperimmune serum (5 ml/kg) be given within 72 hours and followed by 14 or more doses of a potent vaccine[11, 12, 13, 48].

The complications of antirabies serum of equine origin are those of allergic reactions in the form of anaphylaxis, serum sickness or both, and must be guarded against by the usual intradermal or ophthalmic tests for sensitivity. In case of positive results to sen-

sitivity tests, desensitization of the patient must be carried out. The incidence of such reactions has varied from 0 to 20% in several series and, if encountered, should be treated with adrenalin, antihistamines, and/or steroids (ACTH, cortisone)[13].

To obviate such foreign protein reactions occurring with the use of hyperimmune sera of equine or other foreign species origin, attempts have been made to produce a rabies antiserum of human origin. Initial immunization was accomplished in volunteers by administering a combination of five doses of duck embryo vaccine at four-day intervals, followed by a booster dose of HEP Flury vaccine on the 46th day and a final booster dose of duck embryo vaccine on the 288th day. Twenty-four days later—that is, on the 312th day after the first dose—the participants were bled, and the serum was pooled and gamma globulin separated.

These volunteers, having no initial antibodies, responded with variable titers, the pooled serum having a titer of 1:100 against LD_{50} of rabies virus in neutralization tests, and the gamma globulin prepared from this pool a titer of 1:300.

In five subjects given gamma globulin, blood samples tested at intervals for residual antibody showed significant titers through 21 days. Although the passive antibody level resulting from administration of a more potent hyperimmune horse serum was initially higher, the decrease in titer was more gradual with human antibodies by passive transfer. This study confirms earlier work by others that homologous antibody in human beings is far superior to horse antibody on a unit basis, in that horse serum titers usually dropped markedly after ten days, whereas those of human origin generally held through 21 days.

These studies indicate that with more booster inoculations in a larger group of human subjects, antirabies immune gamma globulin could be produced which would be equal in effect to horse serum, without the disadvantages inherent in the use of a foreign protein[14].

Primary Immunization Before Exposure

Rabies prophylaxis in man has long been a special problem when it involved particular groups of individuals with unusual risks of repeated exposure, such as veterinarians, dog-handlers, mailmen, delivery men, and laboratory workers[14].

At present sufficient evidence has accumulated to indicate definitely the establishment of a basic antibody pattern as a primary prophylactic immunization in the high risk incidence groups by the use of three to four intradermal or intramuscular inocula of HEP Flury vaccine at five-day intervals, or a primary series of duck embryo vaccine, followed by one to two doses of the same or an equally potent vaccine as a booster two to six months later. If the person continues to work under risk, he should be revaccinated every two to three years with the same or some equally potent vaccine.

It is important to establish the presence of antibodies by serum neutralization tests following the primary series, and upon re-exposure a single dose is recommended in cases of mild exposure. In cases of severe exposure to known rabid animals, the usual complete postexposure treatment may be justified. When duck embryo vaccine is used for the basic course, the use of NT vaccine for booster inocula at 10 and 20 days may reduce the risk of allergic reactions; or duck embryo vaccine may be used for booster inocula when NT vaccine is used for the basic course of inoculations.

There are no known instances of individuals developing rabies on re-exposure provided that they have had at least one adequate course of rabies vaccine for a previous exposure[8, 11, 52].

Discussion

Once the symptoms of rabies develop, the outcome of the disease is always fatal. It is preventable, however. In the United States as many as 50 thousand people receive antirabies treatment in one form or another, with annual deaths ranging from none to 20.

Within the last few years the incidence of rabies has declined in dogs, the most common source of infection for man; but the

sylvatic reservoir appears to be on the increase. Now as before, control of this problem must be aimed at control in the animal and wildlife population through vigorous state and local programs.

Since its initial introduction as an antirabic vaccine in 1955, 60 thousand 14-dose courses of duck embryo vaccine have been given. Six persons receiving the vaccine have died[55]. In three cases the incubation period was less than 30 days. Two were clearly cases of vaccine failure, and the sixth patient was given antiserum on the third day after receiving a bite from a bat. Injections of duck embryo vaccine were instituted on the fourth day and continued for 14 days; the patient died two months after being bitten. It is felt that this death emphasizes the need for booster inocula on the tenth and twentieth days following the completion of the usual 14 doses.

Failures of rabies vaccine are not common with either the duck embryo or nerve-tissue (Pasteur) type of vaccines. Failures with the use of 5% phenolized vaccine have been said to vary from .04% to 20% and are influenced by many factors such as the status of the biting animal, the location of the bite, delay in treatment, type of treatment, and vaccine. In general, those patients who died of rabies after treatment usually had incubation periods of less than 30 days, although occasionally it was longer.

The impetus for the use of duck embryo vaccine arises from the risk of neuroparalytic accidents that are known to occur in association with the nerve-tissue vaccines. It now appears that this complication should be materially reduced, if not eliminated. with the use of duck embryo or Flury strain avianized rabies vaccine[46, 50].

At present vaccines are used by various health agencies and the question of which to use in the individual patient remains a matter of clinical judgment. One should consider on one hand the longer experience and proved potency of the nerve-tissue vaccines, together with their inherent risk of neuroparalytic accidents; and on the other hand, the duck embryo vaccine, which has not been so extensively tested by challenge doses of virus in the experimental animal, but which is apparently less likely to produce the serious neurologic complications associated with the crude nerve-tissue vaccines.

It is now possible with the use of Flury HEP and duck embryo vaccines and combinations of such vaccines and antiserum to establish a definite actual primary and secondary prophylaxis without the risk of fatal neurologic complications associated with the "Pasteur treatment." New and more rapid methods of diagnosis are now available to complement basic histopathologic and biologic tests to enable the physician to rule out the possibility of this dread disease and to initiate prompt and definitive therapy when indicated.

Conclusions

1. The rabies problem *per se* is one involving public health, veterinary, and medical responsibilities, and its eventual control is that of eliminating the disease in its natural habitat: the animal reservoir.

2. Effective, rapid, economically feasible laboratory techniques such as fluorescent antibody-staining are now available to facilitate rapid diagnosis, complementing basic methods in use today.

3. The crude Pasteur-type vaccines of central-nervous-system origin, with their relatively high incidence of neurologic complications, may become obsolete with the further evaluation of vaccines of embryonic tissue and Flury-type vaccines containing relatively little of the sensitizing myelin or myelin-like antigens.

4. Definitive regimens of prophylaxis have been presented in the management of exposures. It is suggested that commercially available vaccines other than those derived from central-nervous-system tissue (Semple, Harris, Fermi types) be used.

5. Current immunologic evidence now exists which may warrant primary pre-exposure immunization of individuals in so-called high risk exposure groups with the use of booster injections of potent commercially available vaccines in the immediate postexposure state.

6. Further investigation is warranted in the development and adaptation of attenuated or modified live virus vaccines, refinements in existing killed vaccines, and further investigation of the possibilities of production of homologous human gamma globulin antisera in lieu of hyperimmune sera of equine origin.

7. It may be concluded from the evidence presented that in the prophylaxis and treatment of persons actually exposed, when vaccine is indicated, duck embryo, 1 ml given subcutaneously for 14 consecutive days, is the agent of choice, followed by booster doses 10 and 20 days following the last dose of the primary course.

In cases of severe exposure about the head and neck and multiple bites on the extremities, hyperimmune antirabies serum should be administered at the rate of 0.5 ml/kg intramuscularly in one dose, followed by at least 14 consecutive daily doses of vaccine and two booster doses. The infiltration of hyperimmune serum administered locally at the site of the wound is indicated in amounts of not less than 5 ml.

The routine precautions against sensitivity to these biologic preparations must be taken in the form of intradermal or ophthalmic sensitivity testing of both vaccine and serum. Persons found to be sensitive (allergic) to duck embryo vaccine or with histories of severe allergy to eggs should be given Semple vaccine rather than duck embryo; and those sensitive to horse serum should be desensitized prior to administration of hyperimmune serum of equine origin.

(References supplied on request)

The Ideal Research Subject

There are many advantages to research on human beings. The subject is awake and responsive throughout the study. He can participate and report his experiences during the experiment. No anesthetic intervenes to mask or alter the response. The conscious human subject also provides a continuous stimulus to the investigator to be accurate, careful. The investigator who studies man must have a high degree of responsibility and confidence in what he is doing. In man there is little tendency to administer excessive doses of a drug. They are kept constant from one subject to another. No effort is made to seek a response with large physiologically unsound dosages of an experimental drug and negative results are accepted as such.— Louis H. Nahum, M.D., in *Connecticut Medicine*, 92: 2, (Feb.) 1965.

Environment: The Private Practice of Medical Progress

Introduction

YOUR HORIZONS ARE SHOWING, DOCTOR!

W. F. Mayes, M.D.*, *Moderator*
Chapel Hill

During this symposium we will be considering man in his environment, whether layman or professional man. Actually we will be discussing both.

To begin with, we must recognize that human beings, regardless of their particular educational or professional specialty or role in society, have certain individual requirements, human needs, and goals, and that each person must himself relate these needs and goals to the environment in which he finds himself; that he must establish a balance between himself and his environment, and that he must do this conscientiously. Much of this process of establishing an ecologic balance depends upon the individual's horizons—his objectives and motivations. We are aware that in this process man himself is rather insignificant. We might even liken him to a single grain of sand on a broad beach, where he is so surely and easily lost without relationships. In fact, one human being occupies only 2 or 3 cubic feet or less of this relatively infinite space. But he is such an important unit, this organism, this individual; and he has so much to say, and to do, about his relationships!

Basic Requirements

Let us turn first to the patient, the very reason for the doctor's existence, and consider some of his basic requirements, needs, and goals. Every individual pursues a more or less intelligible quest for well-being. The American ideal is the person whose development has been foursquare: physical, mental, social, spiritual—with some balance, some direction. Every person thinks of himself as in some kind of balance and state of health. We would like to believe that he thinks in terms of high-level "wellness"—that is, in comparison with his fellows or with himself and his potentialities.

This balance that he maintains between himself and his environment requires relating the internal environment of his personality, ambitions, desires, and responsibilities to his external environment, with the goal of establishing an equilibrium between action on his own part, and reaction on what surrounds him. In this process there is an absolute necessity for interdependence, for help from others in many respects, in the family and the home. No person as an individual can *be* a family; he is a part of it. He is dependent for information and education outside himself, for gainful employment, for an avocation as well as a vocation, for social involvement. All these things are really requirements in interdependence.

For editorial comment see page 298

Then we come to what might be called a state of "habilitation." I looked up this word to be sure that I did not misuse it; because in reading the papers in this symposium and in listening to previous discussions, I found that when we speak about rehabilitation, we often mean something even more basic—namely, habilitation. This implies being relatively independent: being prepared, equipped, fit, worthy of public respect. This is habilitation.

Now, all of these individual requirements, needs, and goals apply to the physician as a person, as they do to laymen. But the physician has additional needs and goals that do not apply across the board to everybody.

Presented before the Section on Public Health and Education, Medical Society of the State of North Carolina, Charlotte, May 4, 1965.

*Dean, University of North Carolina School of Public Health, Chapel Hill.

Specifically he must have personal motivation—that is, the desire and the will to serve others. He must have pre-professional and professional education, leading to the M.D. degree and progressing, on the postgraduate level, through internship, residency, specialized training, and finally continuing education for the rest of his life.

Social Responsibility

The physician must meet all these professional requirements in addition to his requirements as a person. But there is still another aspect of his life that will be emphasized by the speakers on this symposium: He must meet social responsibilities commensurate with his education and opportunities. A professional man or woman, by the very fact of being professional, is a teacher: to profess, to teach others, to pass on the art and science of his profession to the next generation.

There is also the social responsibility of community leadership in all kinds of civic activities. It may be related directly or indirectly to the practice of medicine, or it may be remotely contributory. And finally, it has become evident, especially in the last two or three generations, that in order to discharge his social responsibility, the physician must participate to some extent in world affairs; must make some specific personal contribution in order to realize the fullness of his opportunities as a "professional" and as a physician.

Where do you stand as an individual, as a physician, in space and time, with regard to your relationships, in establishing an equilibrium with direction? In your particular environment, where do you stand, or, as the British might say, "How are you placed?" What is your outlook? What direction are you going? What are your specific personal and professional objectives? Will reaching these objectives require stretching your present horizons? What are your personal and professional relationships to other people, to other professions, to community organizations, agencies, and institutions? And what personal or professional contributions are you making to the broad world scene in which you play such a small though significant part? In short, how well are you maintaining your own equilibrium, balance, and direction in this magnificent quest? How far *are* you stretching your horizons?

My observation is that, given your general environment; your social and cultural heritage; your individual motivation, objectives and drives; your technical and professional education; the many new challenges and growing needs for your services; the new opportunities of making your professional efforts count for more by combining them with those of your peers and relating them with the other resources of the community in which you live—given all these, there is only one possible conclusion: Your horizons *are* stretching.

* * *

Horizons of Occupational Medicine

Mac Roy Gasque, M.D.
New York

The implementation of an occupational health program can challenge the entire resources of a physician. The problems encountered are diverse: sometimes simple, more often complex.

Single-Plant Programs

Occupational health programs should follow closely the guiding principles recommended by the AMA[1]. A plant physician should recognize the importance of integrating smoothly into local medical attitudes and customs. Maximum success of the program and professional growth depend on cooperation and a communicative relationship with local physicians and hospitals.

If a program is being introduced into a plant for the first time or if an existing program is being substantially changed, misgivings are likely to arise in the local medical community. These misgivings are usually subjective: "How is this program going to affect me and my practice?" If the preventive nature of the program is publicized, the question will be put to rest.

Industrial physicians working in a single plant should study and become thoroughly familiar with state compensation laws. Decisions on disability evaluation should be consistent with these laws.

More often than not, industrial supervisory personnel are poorly informed about the motives, techniques, and value of a plant health program. Management must be educated regarding these matters. Keeping in mind the primary goal of health promotion, the program should be designed to support managerial objectives and philosophies.

Getting to know and gaining the confidence of the employee group does not come easily. From the start, a worker is likely to spot false good-fellowship and medical claptrap. On the other hand, an industrial physician who shows a genuine interest in people and a willingness and ability to solve problems will gain loyal support.

Environmental hygiene

Manufacturing processes often involve the risk of exposure to toxic raw or intermediate materials. Routines for controlling environmental hazards must be conceived and implemented. This is not a casual responsibility. The nature of the hazard may be elusive or variable. In the evolution of new products, scientific data may be lacking. Expensive or uncomfortable control procedures may limit cooperation from both management and production workers.

Multiple-Plant Programs

Horizons expand as responsibilities expand

When a physician's responsibilities shift from a single to a multiple-unit health department, horizons seem to vanish. How can one person learn, or even be familiar with, the various compensation laws of 50 states and perhaps a few foreign countries? Often the best he can do is gain a general idea as to whether the laws are reasonable or weighted or punitive in one direction or another.

When his contact with a plant is infrequent, his knowledge of local medical customs and personalities is necessarily sketchy, but a common denominator of understanding can usually be found by acting on a basis of fundamental ethics and common sense.

Horizons vanish again when one tries to conceive a program to cover multiple plants. How can any one type of program accommodate the cultural and ethnic differences that exist, for example, between a plant at Niagara Falls, on the Canadian border, and another in the segregated Deep South, at Gulfport, Mississippi; or another in the central valley of California, where migrant labor and language barriers exist.

When responsibility extends to several

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plants, a broad repertoire of environmental hygienic skills is needed and varied control measures must be conceived. Here are a few typical problems:

Hydrogen sulfide gas is an intermediate waste product in the manufacture of cellophane. Even slight exposure to this product may irritate the eyes, and extensive exposure can cause death.

Increased atmospheric mercury vapor is a problem in chlorine-producing plants. Routine environmental monitoring and periodic physical examinations provide a basis for control.

Noise in a sawmill operation can be horrendous. Machinery is difficult to insulate, ear plugs more often than not are uncomfortable, but workers must be protected.

Summer heat and humidity can be a seasonal threat to physiologic equanimity. Such problems are typical in steel mills, aluminum fabrication operations, and boiler rooms. Acclimatization takes place but is slow. Somewhat amusing but nevertheless true, it has been found that acclimatization is less slow among workers who have had previous experience operating distillation equipment in humid swamps where alcoholic beverages are sometimes manufactured.

Professional Excellence

There are certain horizons or challenges —and perhaps we can even include values— that transcend numbers. They apply equally to a single plant or to 101 plants. I now speak of professional excellence.

What are the factors that contribute to excellence in the practice of medicine?

1. *Intelligence* is probably mandatory. I doubt that a dull person could qualify.

2. *Talent.* This ingredient may be hard to define, but it is unmistakably useful.

3. *Goodwill.* Perhaps we might substitute an interest in people, or understanding. All three are needed.

4. *Capacity for work.* Without this, none of the other factors can amount to anything really excellent.

You will note that none of the characteristics I have listed—intelligence, talent, an interest in people, a capacity for work—apply exclusively to medicine: they are general in nature and contribute to excellence in any endeavor. One other factor must be included, however, if professional excellence is to be achieved. This factor is *education.*

5. *Education* must be as disciplined and extensive as possible.

The need for professional excellence transcends everything else that we have discussed. It is needed in treating a sunburned nose and in pacifying a hypochondriac. It is needed by the Surgeon General of the United States, by the secretary of the World Health Organization—and even by county health officials and industrial physicians.

The Economics of Occupational Health Programs

Finally, I want to talk about the horizon of economics in occupational health programs. We all at times throw up our hands in frank default or panic when we are asked such a question as, "Does an occupational health program pay its way?" Or, "Can you demonstrate a financial return from such a program?" Lamely, we may answer, "You can't put a price tag on health"; "Health has intrinsic values which are not subject to arithmetic calculation."

These answers are true and for a while may satisfy a sympathetic industrialist or one who has been recently ill himself. They fail, however, to meet the issue head-on. They imply a failure to analyze; they divert or obstruct solutions.

To take the position that occupational health programs cannot be discussed in terms of dollars is roughly equivalent to abandoning the germ theory of infectious disease in favor of witchcraft. To support my contention, it is only necessary to apply a few elementary principles of epidemiology and biostatistics—indeed, arithmetic. Let us first agree on two points: (1) Industrial health programs are preventive in nature; (2) their basic purpose is to promote health. Stated in another way, occupational health programs should reduce sickness and disability.

When we speak of sickness and disability

among large groups of industrial workers, immediately we are dealing with a measurable phenomenon. For example: Salaries continue (certainly for a time) when workers are sick. Continuing to pay the salary of a person who isn't working is certainly a cost factor which can be measured.

Health and accident insurance is offered by most industries. Premiums reflect experience. The more sickness, the larger the premium. Simple arithmetic allows us to add up and measure premiums. This is another factor in the cost of sickness.

Occupational injuries can result in medical expenses and disability payments which can also be measured.

Most industries give their employees small, sometimes large, life insurance policies. Death benefits increase the cost of sickness and disability.

There are many other cost factors related to sickness and disability which are no more difficult to determine.

Table 1
Cost for Sickness and Disability During 1963
Selected Locations

Plant	Population	Cost Per Employee Per Year
A	715	$244.00
B	595	61.00
C	594	249.00
D	561	150.00
E	476	372.00
F	460	256.00

Actual sickness expense in one industry with six plants of similar size has revealed provocative data as shown in Table 1.

At Plant B, sickness costs are strikingly lower. Here a really first-class medical program has been in operation for about ten years. It appears that management has made an investment in health.

At Plant D, the cost of sickness and disability falls in an intermediate range. Four years ago medical facilities were acquired, highly motivated personnel were employed, and a health program was started. The subsequent reduction in the cost of sickness per employee supports the notion that the program is off to a good start.

Traditionally, occupational health programs have been introduced as a manifestation of managerial goodwill. The company may have had a profitable year or two, or perhaps the manager feels an urge to express his altruism—to share the wealth with loyal workers.

These motives are worthy, but they are hardly a sound basis on which to start an occupational health program. Suppose the altruistic manager dies or sells out, or even gets fired. Or suppose he has an unprofitable year. Then there is no wealth to share. The medical program may be de-emphasized; medical personnel may be reduced. When this happens morale is weakened.

Occupational health programs should be undertaken with the clearly defined objective of promoting health. Bookkeeping procedures should be set up to measure performance. Programs conceived in this way are not then subject to nor dependent on the whims of managers or the popularity of an individual medical director.

Occupational health will become much more a reality and less a dream when we accept the challenge to analyze our activities from an economic point of view. Truly this is one problem that can and should be pushed on beyond our present horizons.

Reference

1. Council on Occupational Health of the American Medical Association, JAMA 174: 533-536 (Oct. 1) 1960.

* * *

All Horizons Aren't Governmental

Isabella S. Diamond
Washington, D. C.

I am grateful to my long-time and cherished friend, Dr. Wilson, for permitting me to participate further in what is really my second professional field—namely, the sharing of whatever skills I may have acquired as librarian in the U. S. Treasury with the less privileged citizens of our generation. Because I am now with the American Association of Workers for the Blind, he asked me to discuss the non-governmental, voluntary and, therefore realistically practical avenues of assistance available to the blind as an example of the manner in which laymen, with a will and without governmental assistance, can follow the physician in the rehabilitation of human beings. I may well be of some slight assistance to the physician in outlining ways of transition which he, in turn, can present to his patients as helpful and logical next steps leading again to a full participation in everyday life.

Fifteen years ago combined private and public expenditures in the three broad categories of health, education, and welfare were $35 billion, and the important point to remember is that combined private and public expenditures were almost exactly comparable. Within the last 15 years the population of the United States has increasfrom 151 million in 1950 to 191 million at the beginning of 1964. And along with this population explosion—the aged population (65 years and over) has increased by nearly half—from 12 to 18 million.

Torch-bearers for the Blind

We hear a great deal in the United States these days about the "Establishment"—and generally those who talk about it seem to have in mind a group of key people who run the nation. The idea is an import from Britain—and from the Britain of another time, before the modern tides of public opinion began to flow in a way that no combination of people has yet learned how to control for long. However, in the days when Mr. Gladstone had just begun to speak over the heads of great folk to the English people, while there yet remained in England an interlocking class who ran most things, who always knew who could pull a wire on any subject—in those days, medical influence was used on behalf of blind people in a unique and fascinating way by Dr. Thomas Rhodes Armitage.

Dr. Armitage was a wealthy man who chose to be a physician, but whose career was much hampered by his gradual loss of eyesight. He was the man to see through whom to reach those affluent persons whose consciences bade them do something for blind people. Britains above a certain class in the 1870's, 80's, and 90's were so well off that their consciences hurt them considerably, as evidenced by the many commissions and inquiries including one on housing. It was a time when the question was not how to get the means to do, but of knowing what to do.

Dr. Armitage—with all the good will in the world—stood a chance of using his resources to no good purpose when he encountered an exceptional American, Francis Campbell, who was just then visiting in Britain and who was able to give practical advice about blindness. Mr. Campbell was himself blind, and his career in the field of blindness was outstanding. From this American Dr. Armitage was able to obtain the most up-to-date facts with respect to the management of blindness—facts which had been developed in the crucible of a sociological genius, Dr. Samuel Gridley Howe, the husband of Julia Ward Howe, who was also a physician.

Just about the time an all-out effort against leprosy went aground under the full sail of royal patronage, the management of blindness was tacking cannily into open

*Project Director, American Association for the Blind, Washington, D. C.

water, preparing for one of its most remarkable passages under the expert guidance of Dr. Armitage and a few close friends. In this strategic position he was a classic prototype, for he stood between the *technicians* on blindness on the one hand and the *Establishment* on the other, talking to both with infinite patience; and all concerned were fortunate in the kind of trust he enjoyed. One reason why the effort against leprosy came to grief was that its manipulator was what the British call a "bounder," who failed with the Establishment through his personal characteristics. Armitage on the other hand had not only dignity and grace—of which his full white beard was a symbol—but also that equanimity of which Osler spoke: no matter how bad the day, the spirit which seems to be saying inwardly, "I care very much what happens; but these things shall not *unsettle* me."

I hardly need say, this spirit is one of the most important things Medicine gives down through the ages! We all know the terrible story of Rasputin and the Empress; just consider what it might have meant to the world if the good judgment and complete equanimity of Dr. William Osler could have been brought to bear in that situation, rather than the black magic of the mad monk! I mention this only as an example of the sociologic responsibilities of the doctor-patient relationship, be they large and earth-shaking, or confined to the repercussions in a single home.

There are stories of other physicians who have steered the cause of blind people; for example, an exceptional one today, and in our own country, is thought to be the only ophthalmologist who was ever a teacher of the blind. This is Dr. Richard E. Hoover, who, before he became a physician, developed the system of mobility which sometimes carries his name and sometimes is called "the long cane technique," a term which he modestly prefers.

An ophthalmologist at Johns Hopkins University, Dr. Hoover is more a man of action than of words, although writings of his are available in both medical journals and publications about blindness. He is exceptional in the amount of time he gives, not only to medicine but to rehabilitation. He is thought by workers for the blind to have certain classic qualities which are crucial in securing the confidence of blind people. Some put it simply that he is practical, others that he is down-to-earth; and doubtless the same thing is meant. In any case, he will never tell you "how to do it" where blindness is concerned, but rather will make you want to do your share.

Problems and Resources of the Blind

Both the general practitioner and the ophthalmolgist have golden opportunities to make the most of the self-reliance of the independent person who loses his sight. It is one of the peculiar problems of workers for the blind that such persons will go to almost any length to avoid becoming clients of agencies for the blind, and often they have the financial resources to by-pass many of the common forms of assistance. Ironically, this sometimes means that they miss some useful aids that are made available to the less affluent who seek help from an agency.

Often, however, these independent ones will do almost anything their physicians suggest; indeed they look to the doctor to tell them what to do about their blindness and often are extremely disappointed if he has no ideas. Usually two problems loom above all others in their lives: (1) how to get their reading done, and (2) how to get about? First aid in either case is the person who is willing to act as guide or as reader—two services that require only a modicum of sophistication and experience. On the other hand, braille and mobility training require professional teachers. Guiding and reading alone can get many older persons functioning on a basis which amounts to renewed life rather than a living death. More than that, such help can stimulate both young and old to adopt the more difficult ways and techniques of blindness such as dog guides, braille, the long-cane technique—ways that are so abundantly available now in modern programs for blind people.

Guides and readers for the newly blinded

can be great morale builders and serve as the bridge to rehabilitation. Many distinguished blind people able to command such services as a matter of course are never thought of as blind at all. Three examples from the same city (Baltimore) were H. L. Mencken, Archbishop Curley, and Dr. Thomas Richardson Brown, the noted internist. Many people without a diocese, without a Baltimore Sunpaper, or without the support of a Johns Hopkins Hospital could perform equally well in lesser spheres if essential guiding and reading were done for them; and this is where doctors have a potential influence both with parents and with the community in which they practice. No outlay of money need here be involved; rather the need is for a special kind of companionship between blind people and people who have an outgoing personality and are constructive givers.

The right leadership in medicine will always find a joyful reception in nearly all quarters of work for the blind if it can get under way—not as a highly organized effort but rather in the friendly neighbourly way we like to think of as typically American. Naturally some organization eventually is necessary, but it should be simple and to the point, directly aimed at the practicalities of a blind person's mobility and reading problems—before he can begin to acquire special skills.

Education . . . Work . . . Light

The Frenchman, Valentin Hauy, in 1771, and the American, Samuel Gridley Howe, in the early 1830's, found the inspiration for their life's work in much the same way. Hauy was strolling through the streets of Paris one autumn day when a hooting, jeering crowd caught his attention. Crossing the street, he stared incredulously at a platform raised above the cafe tables where ten blind men were drawing shattering discord from violins, cellos, basses, and viols. Their sightless eyes were ringed with huge pasteboard spectacles, and they wore grotesque robes, dunces' caps, and asses' ears. The rowdies who gathered at night stormed the fragile platform as the lighted candles cast shadows on the weary faces of the blind players.

Hauy viewed the scene with pity and horror, and years later he wrote: "I knew at once I had found my life's work: I would make the blind read." In time this man was to be known throughout Europe as the Father and Apostle of the Blind. And another great Frenchman, Louis Braille, born in 1809, picked up the torch, and when he died in 1852 the Braille alphabet had been invented.

The American, Samuel Gridley Howe, was passing through Paris in 1830—some 60 years after Valentin Hauy had taken that fateful walk in the same city—and was just in time to join the little band that escorted Lafayette to the City Hall during the three-day July Revolution that put Louis Philippe on the throne of France. Later that day, Lafayette admonished the young Howe: "Reserve yourself for the needs of your own country. This is our battle." Soon thereafter Howe returned to Boston; and one day, as he was swinging along Boylston Street, he ran into a small group of friends who were determined to organize a school for the blind in New England. "Here is Howe—the very man we are looking for," said one. "The spark was struck instantly, and the following years proved he had the burning enthusiasm, the strength, the clarity of purpose, the zeal and originality" to accomplish his purpose. Education for the blind was on its way in Europe and the United States.

But more than education was needed and so the Lighthouse movement came into being. Winifred Holt, daughter of Henry Holt the publisher, was its founder. Recreation for the blind was her first idea, but she soon discovered that work—and therefore independence—was the thing most desired, and "Light through Work" became a motto. Today the programs of the many Lighthouses throughout the United States and Europe stress adjustment, training, employment, and recreation; the free services offered range from "the rare gift of improved sight through medical intervention to scholarships for higher education."

American Agencies and Publications

Today there are three oustanding agen-

cies in the field of the blind—The American Association of Instructors of the Blind, created in 1853, with headquarters in St. Louis, Missouri; The American Association of Workers for the Blind, created in 1905, with headquarters in Washington, D. C.; and the American Foundation for the Blind, created in 1921, with headquarters in New York City. There is also the National Society for the Prevention of Blindness, with headquarters in New York City. The American Foundation for the Blind, in 1963, issued the thirteenth edition of "Directory of Agencies Serving Blind Persons in the U. S.," covering all 50 states and virtually all of them products of the twentieth century. In general these are nonprofit organizations, depending on either or both membership dues and fees for the services rendered, and providing services for blind people either as their sole function or as an appreciable segment of their programs.

Helpfuls pamphlets

Now I want to call to your attention several helpful pamphlets in this field:

1. "Training the Volunteer to Assist the Home Teacher of the Adult Blind," was prepared under a grant from the Vocational Rehabilitation Administration (H.E.W.) and revised in 1964. This pamphlet has the blessing and approval of the Red Cross and is widely used throughout their organization. It is available from the Vocational Rehabilitation Administration or the American Association of Workers for the Blind in Washington D. C.

2. An excellent study sponsored by The Seeing Eye, Inc., Morristown, New Jersey, and the American Foundation for the Blind, New York City, is "The Role of the Ophthalmologist in the Rehabilitation of Blind Patients," published in 1959. The findings and conclusions are based on answers to a questionnaire sent to a selected group of members of the American Association of Ophathalmology and Otolaryngology. This study presents an interesting picture of opinions and practices of ophthalmologists and of their possible roles in the future adjustment of blind persons.

3. Another pamphlet, issued by The Seeing Eye, Inc. of Morristown, New Jersey, is entitled "If Blindness Occurs: practical suggestions for those who live or work with newly blinded persons."

4. "Suggestions for Guiding Blind Individuals" is available from the Division of Services for the Blind, Vocational Rehabilitation Administration (H.E.W.), Washington D. C.

All 50 states as well as Puerto Rico and the District of Columbia, now have public programs for the rehabilitation of the blind. In many instances these services are given as part of a total program—including children's services, prevention, public assistance, adjustment training and placement—under a Commission for the Blind, as is the case in North Carolina. Over the years the number of professional personnel increases steadily to meet the growing need for expert service.

In 1961 the American Association of Workers for the Blind and the Vocational Rehabilitation Administration recognized the urgency of compiling and making available for students and others working in the field a comprehensive set of references. The result is a dictionary catalogue of selective annotated source material which I have compiled, comprising some 4,500 references on standard 3 x 5 library cards. The catalogue is divided into 11 major sections with some 280 subject classifications. Moreover, unusual items carry an indication as to place of availability. Quarterly supplements are issued. Forty-five of the states together with Canada, England, India, Israel and Puerto Rico have from 1 to 14 of these sets. I am happy to tell you that North Carolina has three: the Occupational Health Section of the North Carolina State Board of Health, the Mecklenburg County Association for the Blind, and the Regional Library for the Blind— a part of the North Carolina State Library in Raleigh.

Conclusion

In closing I should like to quote from a small annual booklet of poems written by a man who has been not only blind but also

deaf all of his life. He is Robert Smithdas, a valued and successful staff member at the Industrial Home for the Blind in Brooklyn, New York.

A Prayer

Lord give me courage and the grace to bear
Life's tribulations with humility;
That I may learn, through triumph and despair,
What happiness these simple things can be:
To give without desiring to receive;
To love without requiring to be loved;
To revive faith in those who doubt or grieve;
To move the heart that never has been moved.

* * *

Rehabilitation: It's Rewarding

Mary E. Switzer*
Washington, D. C.

Goethe said: "If you treat a man as he is, he will stay as he is; but if you treat him as if he were what he ought to be, and could be, he will become that bigger and better man."

If you, as doctors, apply this concept to every patient who sustains a disability, you are starting the rehabilitation process where it must start—with the practicing physician.

That is the beginning of the process—but it is far from being the end. Just as medicine's arsenal of knowledge, highly-trained personnel, and facilities and equipment have grown during the last 20 years—altering the face of medical practice in the United States in the process—so has the process of comprehensive rehabilitation for disabled people undergone drastic changes. These changes have made it possible to achieve for the disabled many benefits which are as advanced, and sometimes as startling in their way, as the dramatic advances in medicine.

One Saturday afternoon during World War II, the Procurement and Assignment Board, under Dr. Frank Lahey's chairmanship, undertook to learn something about the needs of the armed services for manpower and how a comprehensive approach to the use of the disabled, but rehabilitated, servicemen and women could help meet that need. That day we heard the beginning of the dramatic story of the Air Force rehabilitation program from Major Howard Rusk—the young physician fresh from the practice of internal medicine in St. Louis, who had not learned then, and never has since, how to give up the struggle for something believed in just because it seems hard to convince the right people to get it done.

In a way, that is rehabilitation's story always. When one set of people is convinced you can do something for a given disability, you start on another. Always, there appear to be people, many of them doctors, who take a pessimistic view of the values inherent in disabled people, and in what the community can do to bring a full life to its dependent citizens. Perhaps this is due to ignorance of what has happened since World War II especially, though *something* has been happening for disabled Americans for more than 40 years.

The constituency of the public program of vocational rehabilitation is the disabled population of our country who *can* work and *want to work*. There probably are somewhere between 3 to 5 million such people—and about 350,000, at least, come into this category each year.

Here in North Carolina, there are probably 30,000; last year, nationally, we rehabilitated 120,000, of whom 6,700 were from North Carolina, making North Carolina the fourth ranking state in the nation, by the way, in the number rehabilitated.

As the environment of living and working changes—as it is doing so rapidly and radically throughout our land—where the disabled are, who they are, what they want to do, and what the opportunities are for them—all this changes, too.

*Commissioner of Vocational Rehabilitation, U. S. Department of Health, Education and Welfare, Washington, D. C.

The Broadening Scope of Rehabilitation

Our conception of what can be done to provide the opportunity for our disabled people has broadened greatly since the first vocational rehabilitation program was established in 1920, both in terms of the potentiality of the individual and in his adaptability to the labor market. It was not until 1943 that we thought of medical rehabilitation as an essential part of the total vocational rehabilitation needs. In 1954 we thought of only an occasional victim of mental illness and mental retardation as a suitable candidate for vocational rehabilitation, although the consideration of these disabilities was high-lighted in the 1943 amendments. Last year we rehabilitated more than 7,000 mentally retarded individuals and 14,000 victims of mental illness.

As it happens, legislation now before Congress would greatly improve our program, particularly in expanding help to severely disabled persons. For example, last year the Federal-State program rehabilitated relatively few victims of stroke, perhaps no more than a thousand or so. This new legislation will give us the opportunity and the challenge to make a major breakthrough in all of the areas covered in the report of the President's Commission on Heart Disease, Cancer and Stroke. Each day we learn how to deal more effectively with the scourge of the highway—paraplegia and quadriplegia—but thousands of the youngsters suffering from these most severe disabilities are not rehabilitated fully today, and are wasting away in back rooms, or in nursing homes, because of lack of sufficient financial support in the states, inadequate or no facilities, or lack of faith in the spirit of the individual to respond to rehabilitation services or training.

We have demonstrated through the provisions of the 1954 amendments to the Vocational Rehabilitation Act and the Hill-Burton Act what concentrated efforts can do to overcome blocks to service due to lack of know-how and paucity of trained, dedicated personnel, and lack of facilities.

Concerted drives against dependency have been our watchword. We have been an anti-poverty program since our inception. Last year more than 20,000 of those rehabilitated came from some form of public assistance or other publicly supported welfare. The momentum to prevent dependency due to physical and mental disabilities for those of our citizens who want to work is here. We need to increase that momentum and to make absolutely sure that the handicapped can, in truth, be part of the Great Society.

President Johnson in his Health Message promised "a new life for the disabled." The gates to that new life can be widened and those now on the outskirts can be brought in and made equal to the opportunity given them—often by the miracles of modern medical rehabilitation. They can be absorbed into the world of work by the concerted effort of our agencies, public and private, that make up the vocational rehabilitation services of the country.

Putting to Work What We Know

With the vast new knowledge we have developed from the considerable research that has taken place, our greatest need in health care is to put to work the technical knowledge we have. The special resources for doing this are growing every day. But we still have not solved the problem of how to deliver these services to disabled people, and to chronically ill people who need them so badly.

Physicians of North Carolina know this problem. Here is a state with fine medical schools, with well-run public health services, with a highly effective Division of Vocational Rehabilitation.

Working together, these agencies and universities can, and usually do, provide North Carolina with fine care. If any one of these organizations is unaware of what the others are doing, health care for the people of North Carolina suffers.

To a greater extent than in most states, North Carolina's leaders in medicine and related professions have learned this lesson already. One example is that physicians in North Carolina are the primary source of referrals of disabled people to the Division

of Vocational Rehabilitation. In other states, physicians refer their disabled patients, but in numbers which represent a small part of the rehabilitation agency's case load. In North Carolina last year, physicians referred 2,475 of the 6,214 clients who were subsequently rehabilitated by the state agency. Possibly because of this relationship, the second highest source of referrals were hospitals in North Carolina, which sent 1,034 disabled cases to the Division of Vocational Rehabilitation. This means that well over half of those rehabilitated came to the agency from physicians and hospitals.

These are more than statistics. Everyone subscribes to the principle of early referral for rehabilitation—but here in North Carolina it is a principle which is placed into daily practice. One result can be to shorten the period of frustration and hopelessness for the person who has sustained a disabling injury. Another may be a reduction in the time and expense it takes to achieve maximum rehabilitation.

As an example of this expense, last year the public program of vocational rehabilitation, Federal and State, spent $133 million. Of this, $30,600,000 was paid to physicians, hospitals, and other health and medical facilities. This is evidence of the large involvement of medicine in the vocational rehabilitation program nationally, and the need for competent medical guidance all the way along the line.

Increased Medical Participation—Federal and State

This growing investment in the medical aspects of rehabilitation is one reason that we who work in the program in Washington are, for the most part, concerning ourselves with much the same problems which consume your thoughts and your days here in North Carolina.

For one example, we have been seeking strong medical participation in the work of the Vocational Rehabilitation Administration for several years. We think we have accomplished much, and the medical component of our work is one of our most vital phases. Yet we keep trying to improve it as our involvement in research, training, and service becomes more complex and demanding.

We have an active Medical Advisory Committee composed of some of the most eminent physicians in the country, of which Dr. Howard Rusk is chairman. They will meet soon again to advise us broadly about the future of our program. We have physicians as members of our National Advisory Council on Vocational Rehabilitation, which reviews all of the applications for research grants. We have a Medical Study Section which gives prior technical analysis for research applications in the medical field. We have a medical group which reviews training grants in that field. We are fortunate to have a highly competent physician serving as Deputy Commissioner of the Vocational Rehabilitation Administration. We have full-time physicians on the staff of most of our regional offices and we expect to have one in every regional office before too long.

Much of the same effort is being made here in North Carolina. Today all over the country this medical involvement in the guidance and operation of the vocational rehabilitation program is being exercised more strongly than ever before.

Recently the North Carolina Division of Vocational Rehabilitation appointed a medical consultant in general charge of the medical aspects of its rehabilitation program. Under his direction are five new district medical consultants. At regular times they meet with the rehabilitation counselors to go over the medical problems and needs of every disabled applicant, with special attention to those difficult cases which present problems beyond the resources of the medical facilities of an average community.

With this individual medical insight, a better rehabilitation program for the disabled person can be outlined and a better system of referrals to specialists becomes possible. In short, this leads to an improved method of operation which is certain to provide higher caliber and more effective services to the disabled people.

Manning the Health Team

If you are contending with problems because of shortages of people for the health team, please know that we who labor in Washington are occupied much of the time with the same problem. We would like to see, as I believe you would, not only more professional workers, but better trained people.

In the vocational rehabilitation program we have directed part of our resources to an organized training program, aimed at increasing the supply of several kinds of professional workers who are essential to growth in rehabilitation services. This year we are investing nearly $20 million in this training program.

We are concerned with the basic objective of physicians' involvement in rehabilitation, and for this reason we are reaching out to the medical schools to help the student acquire an understanding of rehabilitation where he learns his other basic precepts of being a good doctor. This year 65 of the nation's 91 schools of medicine and osteopathy received training grants totaling $4,240,000 from our agency to help them include rehabilitation concepts and techniques in their curricula for undergraduate medical students. In addition, about $3,400,000 currently goes to 10 medically oriented research and training centers to carry on an integrated program of research, training, and patient care.

We are deeply committed to increasing the number of specialists in physical medicine and rehabilitation. At present there are about 550 board-certified physiatrists in the United States. We need another 300 immediately, and, on a longer term basis, we think the total need will reach around 3,000. Therefore, we make grants to medical schools to assist their residency training programs and to provide residency traineeships for physicans in physical medicine and rehabilitation. Annually we support more than 250 residency traineeships at a cost of more than $1½ million.

We are equally concerned with seeing that the supply of physical therapists, occupational therapists, speech pathologists and audiologists, rehabilitation counselors, and certain other specialized personnel is increased as rapidly as possible. Grants are made to the schools which have helped them improve and expand their teaching programs, with traineeships available for promising students selected by the schools. All in all, there are probably 3,700 young people studying full time in universities throughout the country, with VRA assistance.

In this medical and allied training we have excellent cooperation from the schools here in North Carolina. We are grateful for the contribution they are making in helping to overcome these serious shortages which threaten the growth of health care and rehabilitation. This year training grants totaling about $358,000 have been made to the Bowman Gray School of Medicine, Duke University, and the University of North Carolina, along with support for specialized training programs provided through the North Carolina State Commission for the Blind and the Durham County Association for the Blind. And several alumni of your schools occupy important posts in teaching and related posts in other parts of the country.

Research—Domestic and International

With the help of many leading universities and other institutions and groups, we conduct a national grant program in support of research in rehabilitation. In many ways, it is one of the most stimulating things we do, for it keeps reminding us constantly of the vigor, imagination and creativeness that exists today in the rehabilitation community of this country. This year the grants we make for this work will total about $21 million. Since the program began 10 years ago, more than 900 grants have supported research and demonstration projects covering practically all aspects of rehabilitation.

At Duke I had the pleasure of attending one of our research seminars last February: a symposium on the neurogenic bladder. This gathering of brilliant physicians exchanged ideas about one of the most impor-

tant problems in the lives of victims of spinal cord injury. Duke also is attempting to develop effective bladder stimulation techniques through a program of equipment, analysis, experimental procedures, and clinical trial.

Duke is the locale for another VRA-supported research project which has special relevance to our earlier discussion. This concerns the care and rehabilitation of discharged patients by supplying the physician with information about the patient's home and community resources, and to activate and coordinate these resources.

Also at Duke is a project, directed by Dr. J. Leonard Goldner, concerned with fitting prostheses in below-the-knee amputations immediately after the operation. It is most interesting that the techniques for these procedures had their origin in Poland with the aid of funds granted to a hospital there by VRA's international research program, supported with counterpart funds.

Another interesting domestic research project operated in this State is under the direction of Dr. Erle Peacock, of the University of North Carolina, and grew out of his international experience.

He is doing marvelous work in the reconstruction of hands damaged from a number of causes: such delicate operations as the transplant of tendons, tissues, skin, and muscles.

Dr. Peacock has been enthusiastic over some of the things he learned by observing one of VRA's international research projects in India, concerned with the rehabilitation of persons with leprosy. He says that the techniques used there have improved the skills of plastic surgeons from this country who went there to observe.

Our international research program has produced a considerable amount of benefits of this nature. It was initiated in 1960 and has grown to cooperative research between the United States and nine other countries —Brazil, India, Israel, Pakistan, Burma, Syria, Poland, Yugoslavia, and the United Arab Republic (Egypt). There are now 61 projects in operation in the nine countries.

Though the foreign countries put up part of the research costs, the VRA support is from counterpart funds owned by the United States in those countries as a result of purchases of surplus U.S. farm commodities.

Conclusion

We have spoken chiefly of the medical aspects of the program, but I would like to mention one or two other facets of significance.

When we speak about a war on poverty, we are speaking about the disabled who need our services and who must have them if our final dream is to be a reality for our disabled people. In spite of all the resources we have, we cannot accomplish what we wish for our constituency. The legislation I mentioned earlier is a comprehensive proposal enlarging the scope of our activities—improvement of financing certain aspects of the program; support for enlarged training program for workshops; extended facilities building program; and a data exchange service so important in our modern day. Already hearings have been held in both the House and Senate, and with the record of the Congress on Medicare and Aid to Education, we are hopeful of early action.

Taken together with the recommendations of the President's Commission on Heart Disease, Cancer, and Stroke, the years ahead offer greater opportunities than ever for serving more disabled people and making real for them our Department's motto, "Hope, the Anchor of Life."

* * *

Summary

TRACKING A MEDICAL COURSE

Dr. Mayes

Considering these three stimulating and moving presentations—and their far-reaching implications—how then do we track a medical course?

Dr. Gasque has started with the "grain-of-sand" approach—with the individual physician serving in this traditional one-to-one clinical relationship, giving direct, personal medical care to his patients in a single industrial setting. He then moved the physician to a broader setting of service, in which he was compelled to consider broader aspects of medical care—for example, the environmental settings of several different industrial operations; the varying management and labor policies in these different geographic locations, to be dealt with and, if possible, reconciled; the range of differing patterns of medical organization, policy, and medical care facilities actually existing in these locations. Finally, he impressed us with the necessity—and practicality—of reckoning preventive health care services in economic terms. In these and others aspects of his address he has forced us to raise our sights, to broaden our objectives, to see the relationship of our professional efforts to an ever-enlarging environment.

Miss Diamond, in an engaging and convincing manner, then raised the physician above his daily routine to a higher level of objectivity, perspective, and vision, in order to show him what happens when an urgent human need for his services is brought to the attention of discerning and able private citizens who have the imagination, altruism, and organizational ability to find and provide the necessary ways and means of bringing together the *needy* (the patient) and the *needed* (the physician).

Thus Miss Diamond has demonstrated the necessity of volunteer citizens, physical facilities, technical equipment, and financial and managerial organization, in order to make these specialized services possible. All these components provided by people *other than the physician* are necessary, in order to enable him to meet what Miss Diamond calls the "sociological responsibilities of the doctor-patient relationship."

Finally, Miss Switzer has shown quite vividly and dramatically the centrality of the medical profession—and of the essentiality of your role as physician—in making it possible for thousands of people who had lost hope to join again the ranks of useful, productive and happy citizens.

She has clearly portrayed the physician as the necessary ingredient to the combined efforts of industry (as presented by Dr. Gasque), and of the informed and inspired individual (as demonstrated by Miss Diamond), and finally of government—on the complex problem of rehabilitation.

She has done more. I believe that Miss Switzer, along with her confreres in this symposium, has given us a new and living concept of the term *habilitation*: the possibility of a fuller life.

I believe you will agree with me, ladies and gentlemen: They have stretched our horizons!

Erratum

In the paper entitled "Carcinoid Tumors and the Carcinoid Syndrome: A Study of Twenty-two Cases," by David L. McCullough and Richard T. Myers (North Carolina Medical Journal, May, 1965), the sentence beginning on line 11, column 2, page 204 should read as follows: "Since histamine is such a potent stimulus for the release of gastric acid, I wonder if it is possible that the patient reported here has a carcinoid which in some way liberates histamine."

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JULY, 1965

SUGGESTIONS FOR AUTHORS

The *North Carolina Medical Journal* welcomes original contributions to its scientific pages, expecting only that they be under review solely by this *Journal* at a given time, and that they follow a few simple guidelines. The guidelines are as follows:

1. Subject Matter

Educational articles, especially those in which particular applications to the practice of medicine in North Carolina are developed, are one of the main objectives of this *Journal*.

Articles reporting original work by North Carolina physicians are invited, whether the work is done in a clinic, a laboratory, or both. The editor and his consultants will evaluate the work by the usual criteria, including a proper discussion of previous work, control observations, and statistical tests where indicated.

Historical articles, especially those dealing with local history, are considered of real value and interest.

2. Manuscripts

An original and a carbon copy of the manuscript should be submitted, one for review by the editorial staff, the other by referees. The manuscript should be typed on standard-size paper, double-spaced, with wide margins (one inch on each side).

3. Bibliographic References

References to books and articles should be indicated by consecutive numerals throughout the text and then typed, double-spaced, on a separate page at the end of the manuscript. Books and articles not indicated by numerals in the paper should not be included, "unless an exhaustive review of the literature has been made on a subject of sufficient importance to warrant such a survey."[1] Such a bibliography is seldom justified.

References will be much more valuable to the reader if they are given in a proper form and contain the full information necessary to locate them easily. The *North Carolina Medical Journal* follows the form used in the journals of the American Medical Association and the *Index Medicus*, giving the author's surname and initials, title of the article, name of the periodical, volume, inclusive page numbers, and the date of publication. It is believed that this style makes it easier for the reader to judge whether the reference is likely to prove useful to him, and enables him to locate it more quickly.

4. Tables and Illustrations

Tables and legends for illustrations should be typed on separate sheets of paper. The illustrations should be glossy black-and-white prints or line drawings. It is necessary to obtain permission from the author or publisher to reproduce illustrations which have been published elsewhere.

The *North Carolina Medical Journal* pays up to $20 on the cost of cuts for any one article. This amount usually covers the expense of reproducing from two to five illustrations, depending on the size and type of cuts required. Line drawings and graphs are less expensive to reproduce than photographs. Authors may publish additional illustrations by paying the extra cost.

The style followed by this *Journal* will be, in general, that outlined in the Style Book issued by the Scientific Publications Division of the American Medical Association, John H. Talbot, M.D., director.

By following the above suggestions, writers will greatly expedite the publication of papers accepted by the *North Carolina Medical Journal*.

1. Fishbein M.: Medical Writing, ed. 2, Chicago, American Medical Association, 1948.

JULY, 1965

JOURNAL ADVERTISING

Like all medical journals, this one receives significant support from advertising revenue. Unlike the controlled circulation journals, this one receives other significant support in the form of Society subsidy. This dual support is proper since the JOURNAL serves as a medium of communication within the society as well as an advertising medium. During the past few years there has been a considerable decline in state medical journal advertising on the part of drug manufacturers. Part of this is the result of the decrease in new drug introductions. Part of it no doubt represents a decision by advertisers that their money is better spent elsewhere. In any event, the

JOURNAL costs the Society more to operate now than it once did, although the increase in membership has made the per capita cost about the same.

In light of the long-continued downturn in advertising, it is encouraging to see signs of favorable change. This upturn in advertising is illustrated by a nine-page commitment on the part of one drug firm in the current issue. Perhaps the size of our market, the efforts of state journals to convince advertisers that they can reach a special market through their pages, and the confidence of manufacturers in their own products have combined to start a new era. We hope so, and we hope that our readers will encourage the advertisers with their response.

* * *

RABIES

Along with a fear of snakes out of proportion to the prevalence of snake bite, the public has a dread of rabies out of proportion to its prevalence. Unlike snake bite, however, the potential danger from rabies is a great one, and the fears of the public are not out of order. Since the physician must be prepared to answer questions from his patients, it was felt that a comprehensive review of the subject would be of use as a reference. Dr. Bickley's qualification in both human and veterinary medicine, make his authorship especially welcome.

At the risk of offending the fox hunters in our readership, note must be taken of the part the fox plays in keeping rabies a menace. From Alabama north, the fox constitutes a major reservoir of rabies among the wild animals. His habits are such that he comes in contact with man and the domestic animals, bringing his threat literally close to home. At one time foxes were widely destroyed, but hunters have succeeded in suppressing attempts at large-scale fox eradication programs, and this animal is increasing in number, if anything. It can be argued that attempts to eliminate predators may upset the balance of nature, as has been the case with elimination of the cougar in the American West, but the case for getting rid of foxes is a good one, at least to a trout fisherman.

THE MEDICAL ENVIRONMENT

At the 1965 meeting of the state society there was a symposium on "Environment: The Private Practice of Medical Progress," and the papers presented appear in this issue of the JOURNAL. Their publication gives an opportunity to mention that we are probably about to see the most marked changes in medical practice in many years, with the advent of the Medicare program, and possibly the establishment of regional centers for research and treatment directed toward specific groups of diseases.

It is always difficult to assess one's own time, but the forces abroad this year are so apparent that most of us must be aware that we are on the threshold of a new era. Extinct forms of life got that way because they could not adapt to the changes in their environment. We will have to adapt, and the first step in that direction is to learn the nature of the changes. The JOURNAL will do what it can to bring information relating to this state's problems with the new order.

A WORD IN TIME

North Carolina physicians should be aware that only legend drugs (except insulin) are eligible for payment under the State Board of Public Welfare's prescription drug service, including MAA (Kerr-Mills).

The prescription drug service, which was implemented January 1, 1965, adopted the policy of payment for only those drugs which by law require a physician's prescription. This decision was reached following consultation with a joint committee from the State Medical Society and the State Pharmaceutical Association. The consensus was that this policy would keep the service within monetary bounds, best meet the patient's needs, interfere least with medical practice, and be less complex to administer than other limiting measures.

Prescribing physicians might find it beneficial to advise patients under this program that all their prescriptions might not be covered, and thereby save the physician and the pharmacist some trouble at times when non-legend drugs are prescribed. In situations where one legend drug and one non-legend drug are prescribed, the service could pay for the former but not the latter. Physician, patient, and pharmacist understanding of the limiting reasons will make for smoother operation.—*From the Raleigh office of the State Society.*

Correspondence

PHYSICIANS FOR AUTOMOTIVE SAFETY

To the Editor:

On April 7, at noon, 30 physicians of a newly organized Physicians for Automotive Safety made a "dignified protest" before the 1965 International Automobile Show at the New York Coliseum. Fourteen specific objections to current automobile design were indicated on the placards which the physicians carried. Since the protest, the response from the public and our fellow physicians reflects sentiment that our action was long overdue. Despite past intensive programs directed at control of the environment (the highway) and the host (man), little attention has been directed towards preventive countermeasures for the specific agent (the automobile). Defective automobile design is responsible for much of the epidemic injury, disfigurements, and disabilities.

All the previous resolutions of the American Medical Association and the American College of Surgeons asking that the industry make a safer car have been almost completely ignored. There will be no conflict with the regular medical organization activities on automotive safety, and the Physicians for Automotive Safety will cooperate to reinforce the mutual objective.

The Physicians for Automotive Safety, as a smaller and more flexible organization, will direct programs specifically to effecting occupant protection in motor vehicles. Physicians for Automotive Safety represents an attempt at organization of the practicing medical profession to cope with a known mechanical epidemiologic agent. The nature of the present epidemic clearly justifies this approach.

Membership inquiries and suggestions for future action should be directed to Dr. Arnold Constad, Secretary-Treasurer, 527 Morris Avenue, Springfield, New Jersey. Basic membership fee is $5, contributing membership $15, sustaining membership $25 per year. Hopefully, physicians from every section of the country will join to give meaningful influence for this new medical group.

SEYMOUR CHARLES, M.D.
President

Committees & Organizations

COMMITTEE ON CHILD HEALTH AND POLIOMYELITIS

More than three million North Carolinians have been immunized against poliomyelitis with the Sabin Oral Vaccine, according to county by county reports just compiled by the office of the Medical Society of the State of North Carolina. The Society, through its Committee on Child Health and Poliomyelitis, now urges all first grade children entering school next fall, who have completed a series of polio immunizations, to also obtain a booster dose prior to the start of the fall school term.

Dr. Richard S. Kelly, Jr., of Fayetteville, chairman of the Society's Committee on Child Health and Poliomyelitis, recommends that all children not having availed themselves of the immunization, or who have come into the state without immunization, should commence a series of oral polio vaccine immediately.

Persons needing booster doses or a full course of immunization are encouraged to communicate with their family physician for information and direction about the immunization.

Dr. Kelly praised the efforts of the many volunteer organizations and individuals in North Carolina who assisted the various county medical societies in organizing, promoting, and staffing the "Stop-Polio" clinics. Without these volunteers, he said, such an effective program would not have been possible.

Dr. Kelly said that the recommendations that persons through the age of 18 take the Sabin Oral vaccine are in line with those of an Advisory Committee to the Surgeon General of the U. S. Public Health Service, and that when given to this group it is safe, effective and easy to take.

Dr. Jacob Koomen, Jr., Assistant State Health Director, called attention to the unprecedented decline in the number of poliomyelitis cases in the United States since the advent of polio vaccines and pointed out that there were only nine cases reported in North Carolina in 1964. This is a decline, he said, from an all time high of 2,516 cases

reported to the State Board of Health in 1948.

State Health Director Dr. J. W. R. Norton and Dr. Koomen agree that such a spectacular decline in the incidence of polio cases in North Carolina can certainly be related to the use of polio vaccine and could only come about by their vigorous use in the child population. At the present time, they say, North Carolina is pretty well protected, but as new generations come along they must also be immunized against polio to insure the effectiveness of what has already been accomplished. Public Health officials and private physicians have an unusual opportunity in the period ahead of working together in the interest of maintaining a high level of polio immunization among our North Carolina youth.

The State Health Department officials and the Medical Society representatives all emphasized the importance of children being started on a course of polio immunization within the early months of life and in any event such an immunization should be completed within the first year of life. Some physicians recommend starting polio immunization as early as two months of age.

Virtually every county in the State has conducted county-wide mass immunization campaigns sometime during the last 18-month period to make North Carolina one of the first states in the country to accomplish polio immunization for so extensive a segment of its population through such intensive campaigns.

Is the hot, sticky weather getting you down? That's because in hot weather your heart has to work harder to keep your body temperature normal. The North Carolina Heart Association's advice is—don't add to the summer work of your heart; don't overwork, overplay or overeat.

Taking an auto trip? The North Carolina Heart Association advises breaking up your trip with frequent stops. Sitting for long stretches is bad for your circulation. So—stop the car; get out and stretch your legs. It's good for you.

Excessive speed caused 35% of the 48,000 highway deaths in America during 1964. Driving on the wrong side of the road and reckless driving accounted for another 30% of the carnage.

Bulletin Board

COMING MEETINGS

The Physicians' Institute (for NCAGP members)—Jack Tar Hotel, Durham, July 28 - August 1.

Ninth District Medical Society Meeting—Salisbury, Sunday, August 29.

State Rural Health Conference—Memorial Auditorium, Raleigh, October 9.

North and South Carolina Societies of Ophthalmology and Otolaryngology—Myrtle Beach, September 12-14.

Charlotte Postgraduate Seminar—Presbyterian Hospital, Charlotte, September 29-30.

Fifth District Medical Society, Annual Meeting—Mid Pines Club, Southern Pines, October 8.

North Carolina State Rural Health Conference—Memorial Auditorium, Raleigh, October 9.

North Carolina Academy of General Practice, Annual Meeting—Jack Tar Hotel, Durham, October 31 - November 2.

North Carolina Pediatrics Society, Annual Meeting—Mid Pines Club, Southern Pines, November 5-6.

Committee on Injuries, American Academy of Orthopedic Surgeons, Second Postgraduate Course on Fractures and Other Injuries—Riviera Motel, Atlanta, Georgia, October 11-13.

George Washington University School of Medicine, Symposium on Suicide: Its Nature, Cause, and Prevention—Lisner Auditorium, Washington, D. C., October 14.

American Academy of Pediatrics, Annual Meeting—The Palmer House, Chicago, October 23-24.

National Conference on the Medical Aspects of Sports—Benjamin Franklin Hotel, Philadelphia, Pennsylvania, November 28.

New Members of the State Society

Drs. Joseph Lee, III, N. Piedmont Ave., Kings Mountain; Richard Lionel Rogers, Pd., 673 Biltmore Ave., Asheville; Joseph George Lopez, GP, Box 575, Denton; Fitzhugh Lee Fussell, Jr., GP, 442 Jackson St., Roanoke Rapids; Robert Melvin Prince, Jr., 316 E. Morehead St., Charlotte; John Tindal Cuttino, Path, Box 2554, Charlotte; Calvin Barton Reviere, R, 626 Hamilton Rd., Roanoke Rapids; Lester Richard Barden, GP, 316 E. Third St., Chadbourn; Patrick Dan Kenan, 114 Newell St., Durham; LeRoy Russell Swift, ObG, 1111 Fayetteville St., Durham.

Correction

Dr. Virginia Oates Sanford, O'Berry School, Goldsboro, was incorrectly listed as a new member of the State Medical Society in May, 1965. Dr. Sanford has been a member of the Society since 1963.

WHEN MOTHER'S IRON ISN'T UP TO MOTHERHOOD

IN BRIEF: **ACTIONS AND USES:** A single dose of Imferon (iron dextran injection) will measurably begin to raise hemoglobin and a complete course of therapy will effectively rebuild iron reserves. The drug is indicated only for specifically-diagnosed cases of iron deficiency anemia and then only when oral administration of iron is ineffective or impractical. Such iron deficiency anemia may include: patients in the last trimester of pregnancy; patients with gastrointestinal disease or those recovering from gastrointestinal surgery; patients with chronic bleeding with continual and extensive iron losses not rapidly replenishable with oral iron; patients intolerant of blood transfusion *as a source of iron;* infants with hypochromic anemia; patients who cannot be relied upon to take oral iron.

COMPOSITION: Imferon (iron dextran injection) is a well-tolerated solution of iron dextran complex providing an equivalent of 50 mg. of elemental iron in each cc. The solution contains 0.9% sodium chloride and has a pH of 5.2-6.0. The 10 cc. vial contains 0.5% phenol as a preservative.

ADMINISTRATION AND DOSAGE: Dosage, based upon body weight and Gm. Hb./100 cc. of blood, ranges from 0.5 cc. in infants to 5.0 cc. in adults, daily, every other day, or weekly. The total iron requirement for the individual patient is readily obtainable from the dosage chart in the package insert. Deep intramuscular injection in the upper outer quadrant of the buttock, using a Z-track technique, (with displacement of the skin laterally prior to injection), insures absorption and will help avoid staining of the skin. A 2-inch needle is recommended for the adult of average size.

SIDE EFFECTS: Local and systemic side effects are few. Staining of the skin may occur. Excessive dosage, beyond the calculated need, may cause hemosiderosis. Although allergic or anaphylactoid reactions are not common, occasional severe reactions have been observed, including three fatal reactions which may have been due to Imferon (iron dextran injection). Urticaria, arthralgia, lymphadenopathy, nausea, headache, and fever have occasionally been reported. Initial test doses of 0.5 cc. are advisable.

PRECAUTIONS: If sensitivity to test doses is manifested, the drug should not be given. Imferon (iron dextran injection) must be administered by deep intramuscular injection only. Inject only in the upper outer quadrant of the buttock, not in the arm or other exposed area.

CONTRAINDICATIONS: Imferon (iron dextran injection) is contraindicated in patients sensitive to iron dextran complex. Since its use is intended for the treatment of iron deficiency anemia only, it is contraindicated in other anemias.

CARCINOGENICITY POTENTIAL: Using relatively massive doses, Imferon (iron dextran injection) has been shown to produce sarcoma in rats, mice and rabbits and possibly in hamsters, but not in guinea pigs. The risk of carcinogenesis, if any in man, following recommended therapy with Imferon (iron dextran injection) appears to be extremely small.

SUPPLIED: 2 cc. ampuls, boxes of 10; 5 cc. ampuls, boxes of 4; 10 cc. multiple dose vials.

in iron deficiency anemia for rapid and predictable replacement of iron reserves

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State Rural Health Conference

October 9, 1965, has been announced as the date for the State Rural Health Conference sponsored by the Medical Society of the State of North Carolina through its Committee on Rural Health. The day-long program will be held at the Raleigh Memorial Auditorium and will include a dutch luncheon. Program details will be announced in the near future.

News Notes from the Bowman Gray School of Medicine of Wake Forest College

Construction of new facilities for the Bowman Gray School of Medicine and North Carolina Baptist Hospital is tentatively scheduled to begin in April, 1966.

The projected construction timetable for the $17-million expansion and redevelopment project was announced recently by the Medical Center Development Committee.

A new power plant, which will serve the entire medical center, is the first unit to be built. It will be located on the north side of the 33-acre medical center campus. Construction of other units will follow in order until the project is completed in 1969.

Major elements of the program include an 86,000-square-foot addition to the medical school on the north side of the campus; a 14-story central hospital structure and patient tower on the west side; and a paramedical school building and auditorium to be located within the medical school addition.

The construction schedule remains contingent upon the receipt of matching funds from the federal government to support the program. A campaign, initiated in October, 1963, for private funds to be used in the expansion resulted in pledges totaling $7,449,130. In addition, more than $1 million has been pledged by the full-time clinical faculty of the medical school.

* * *

Robert M. Dacus III of Greenville, S. C., one of 49 members of the Bowman Gray graduating class on whom the M.D. degree was conferred June 7, is the recipient of the highest honor that can be bestowed on a student by the medical school faculty.

He was presented the Faculty Award, an engraved plaque, at the annual student awards ceremony during commencement week. The Faculty Award is given annually to a senior student for outstanding scholarship and character during four years of medical education.

Dacus, a member of Alpha Omega Alpha, also was presented the Obstetrics and Gynecology Merit Award. This award, which includes a $50 prize, is presented annually to a senior who has demonstrated outstanding academic and professional stature in obstetrics and gynecology.

Five other students received special recognition for outstanding achievement in scholarship and medical writing.

Godfrey P. Oakley Jr. of Greenville, N. C., was the recipient of the Pediatric Merit Award. Richard E. Bird of Greensboro was the winner of the Best Student Paper Award for his dissertation on "The Direct Renal Action of Vasopressin on Electrolyte Excretion."

Runners-up in the student medical writing competition were Samuel H. Imamura of Kyoto, Japan, and Gary W. Ardison of Hampden, Mass.

Gerry D. Martin of Troutman, a rising junior, was selected by the basic science faculty to receive the Roche Award, which signifies outstanding achievement during the first two years of medical school.

* * *

Dr. J. Rupert Ravens, assistant professor of neuropathology and associate in neurology at the Bowman Gray School of Medicine, was in South America for three weeks during May as a visiting professor of neuropathology.

He served a two-week professorship at the Cayetano Heredia Faculty of Medicine of the Peruvian University of Medical and Biological Sciences, Lima, Peru, and was awarded an honorary doctorate upon the completion of his visit.

Dr. Ravens also lectured at the Medical School of the University of Antioquia, Medallin, Colombia, and at the Medical School of the Valley University, Cali, Colombia.

* * *

Dr. Edwin H. Martinat, assistant professor of orthopedics and assistant professor of physical medicine and rehabilitation, was recently elected vice president of the North Carolina Rehabilitation.

* * *

Dr. A. Robert Cordell, associate professor of surgery, has been elected president-elect of the North Carolina Heart Association.

* * *

Mrs. Pauline W. Hester, assistant director of the School of Anesthesia, was recently named president-elect of the Carolinas-Virginia Assembly of Nurse Anesthetists. She is a past president of the North Carolina Association of Nurse Anesthetists.

* * *

Dr. Howard H. Bradshaw, professor and chairman of the Department of Surgery, has been elected to the executive committee of the United Medical Research Foundation of North Carolina.

* * *

Dr. William M. McKinney, assistant professor of neurology, and Dr. Fredrick L. Thurstone, assistant professor and director of the Department of Biomedical Engineering, participated in a

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Doré Illustration
from
Dante's Inferno

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IN BRIEF:

Indications: In depression of any kind—neurotic and psychotic depressive reactions; manic-depressive or involutional psychotic reactions.

Contraindications and Precautions: Glaucoma, urethral or ureteral spasm, recent myocardial infarction, severe coronary heart disease and epilepsy. Should not be given within two weeks of treatment with a monoamine oxidase inhibitor. Safety in human pregnancy has not been established.

Adverse Effects: Side effects, usually mild, may include: dry mouth, constipation, dizziness, palpitation, delayed urination, "bad taste," sensory illusion, tinnitus, agitation and stimulation, sweating, drowsiness, headache, orthostatic hypotension, flushing, nausea, cramps, weakness, blurred vision and mydriasis, rash, allergy, transient eosinophilia, granulopenia, altered liver function, ataxia and extrapyramidal signs.

Supplied: Norpramin (desipramine hydrochloride) tablets of 25 mg., in bottles of 50, 500 and 1000.

recent International Conference on Diagnostic Ultrasound in Pittsburgh, Pa.

Dr. McKinney spoke on "Significance of Intracranial Echo Pulsations." Dr. Thurstone presented a paper on "Focused Transducer Arrays in an Ultrasonic Scanning System for Biologic Tissue."

* * *

Dr. William H. Boyce, professor of urology, spoke on "Urologic Education in the University Center" at a recent meeting of the Society of University Urology Residents in New Orleans. He also presented an exhibit on "Human Renal Arterial Blood Flow" at a meeting of the Southeastern Section, American Urology Association, May 10-13, in New Orleans.

* * *

Dr. Richard L. Burt, professor of obstetrics and gynecology, spoke at a meeting of the Medical Association of Georgia May 3 in Augusta, Ga. His topic was "Diabetes and Pregnancy—The Obstetrical Aspects."

* * *

Five faculty members of the Bowman Gray School of Medicine participated in scientific program for the annual meeting of the South Carolina Medical Association May 5-6 in Myrtle Beach, S. C.

Dr. Courtland H. Davis Jr., associate professor of surgery, presented a paper on "Differential Diagnosis of Spinal Cord and Nerve Root Syndromes." Dr. Emery C. Miller Jr., associate professor of medicine, spoke on "Current Concepts in the Diagnosis and Management of Diabetes Mellitus."

Dr. James F. Toole, professor and chairman of the Department of Neurology, spoke on "A Rapid, Accurate Neurological Examination for the Office" and served as moderator for a panel discussion on "Present-Day Diagnosis and Management of Strokes." Dr. C. Glenn Sawyer, professor of medicine, presented a clinico-pathological conference on a selected cardiac emergency case and moderated a panel on "Cardiac Emergencies." Dr. Robert B. Headley, assistant professor of medicine, participated on both panels.

* * *

Mrs. Ethel M. Nash, assistant professor of preventive medicine, participated in a conference on "The Social Responsibility of Gynecology and Obstetrics" May 7 at the Johns Hopkins Hospital. She spoke on "Divorce: Marriage Counseling."

* * *

Dr. I. Meschan, professor and chairman of the Department of Radiology, spoke at a meeting of the Alpha Omega Alpha Chapter at the University of Arkansas School of Medicine May 7. His topic was "Present Day Approaches to Radiologic Investigation of the Urinary Tract."

Dr. Sherrill Hudspeth, assistant professor of surgery, was recently elected to membership in the American Association for Thoracic Surgery.

Dr. C. Glenn Sawyer, professor of medicine, has been elected a fellow of the Council of Clinical Cardiology.

News Notes from the University of North Carolina School of Medicine

The North Carolina Memorial Hospital, named with 16 other medical institutions in North and South Carolina as not complying with the Civil Rights Act of 1964, is taking immediate steps to obey laws affecting the hospital, it was announced recently by Chancellor Paul F. Sharp.

"It is the University's intention to comply with the law," said Chancellor Sharp. "We had thought that we were in accord with the law in our hospital practices. When it was brought to the University's attention by visiting inspection committees that N. C. Memorial Hospital does not fully comply with rules of the Civil Rights Act of 1964, the appropriate authorities were assured that the University will meet all necessary requirements."

The decision to comply was approved by the University's board of trustee's executive committee.

* * *

Dr. Christopher C. Fordham III has been appointed assistant dean for student affairs at the University of North Carolina School of Medicine, effective July 1.

He will continue as an associate professor of medicine and will continue his research on kidney disease and electrolytes.

Dr. Fordham has been a member of the UNC medical faculty since the summer of 1958. He was named chairman of the medical school's Student-Faculty Advisory Board last January.

* * *

Medical students at UNC recently conferred their "The Professor Award" for 1965 on the chairman of the pediatrics department.

Dr. Floyd W. Denny Jr., 41-year old specialist in children's diseases and medical faculty member here since 1960, was selected by the students as the faculty member "who by his willingness, understanding and ability has contributed most to our medical education."

Four other awards were presented during the annual Student-Faculty Day program.

Dr. Charles W. Hooker, chairman of the anatomy department, was selected for the Medical Basic Science Teaching Award for his "ability to stimulate the critical inquiry and perseverance that are requisite to learning."

Two physicians in advanced training at North Carolina Memorial Hospital here received special awards.

Dr. James Robinson Harper, a resident in medicine, was presented the Henry C. Fordham

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Award and Dr. Paul Terry Cochran, an intern in medicine, received the Outstanding Intern Award.

The William deB. MacNider Award for a second-year medical student was presented to Charles Allan Eure of Roduco in Gates County.

* * *

Thirteen medical students at the University of North Carolina were initiated into the Gamma Chapter of Alpha Omega Alpha, national honorary medical society, at UNC recently.

The ninth annual Adam T. Thorp, III Memorial Lecture was held in conjunction with the announcement of new members. The speaker was Dr. Carl V. Moore, chairman of the Department of Medicine at Washington University School of Medicine in St. Louis, Mo.

Third-year medical students initiated were William Hampton Bowers of Melvin Hill, Robert Clayton Gibson, III of Winchester, Va., and Robert English Sevier of Asheville.

Seniors elected to society membership were Silas Bodie Coley of Raleigh, Robert Vernon Fulk, Jr., of Wilmington, Edgar Givens Gallagher, of Charlotte, John Benjamin Hammett of Pennsboro, W. Va., William Dumas McLester of Rockingham, Thomas Lemuel Presson of Monroe, and Willis Howard Williams of Robbins.

Three senior students elected in their junior year were Robert Lee Grubb, Jr. of Charlotte, James Otis Burke, Jr. of Lexington and Edgar Jerome Hocutt of Chapel Hill.

Dr. Thomas W. Farmer, acting chairman of the Department of Medicine at the UNC School of Medicine, was initiated as a faculty member.

* * *

Hospital administrators, hospital trustees and architects explored some of the problems in planning hospital construction projects at a two-day workshop in Chapel Hill recently.

A highlight of the workshop was a discussion of the North Carolina Medical Care Commission's "Procedure for Submitting Long-Range Building Development Plans."

The workshop was sponsored jointly by the Department of Hospital Administration at the University of North Carolina School of Medicine and the American Institute of Architects. Cooperating were the North Carolina Medical Care Commission, the North Carolina Hospital Association, the Duke Endowment and the School of Design at North Carolina State University in Raleigh.

* * *

Dean Darrel J. Mase of the College of Health Related Professions at the University of Florida was the speaker on May 14 at the seventh annual program of recognition for graduates of the physical therapy program at UNC.

The special program was sponsored by the Section of Physical Therapy at the UNC School of Medicine.

The origin of a substance in the blood which helps to ward off the formation of potentially dangerous clots has been traced to the inner lining of blood vessel walls.

Dr. Rudolf Holemans, a research associate at the UNC School of Medicine, reported to the Federation of American Societies for Experimental Biology in Atlantic City recently that the finding resulted from experiments with dogs.

The human blood has an enzyme system which is thought to be important in keeping blood vessels open by dissolving fibrin deposits and fibrin-containing blood clots which may form in the vessels.

Since the formation of fibrin deposits on vessel walls is considered by many medical sicentists to be an early phenomenon in the development of arteriosclerosis, it has been thought that the disease may be promoted by a decrease in the activity of the blood's special enzyme system.

Dr. Holemans told the worldwide meeting of experimental biologists that the dog study at UNC was undertaken to find out the origin of profibrinolysin activator.

News Notes from the Duke University Medical Center

Eighty-four medical school seniors were graduated from the Duke University School of Medicine in ceremonies held at Duke Chapel on Sunday, June 6.

Administering a modernized version of the Oath of Hippocrates for the first time was Medical School Dean William G. Anlyan, assisted by Dr. E. Croft Long, assistant dean for student affairs.

William Hall Spencer, III, delivered the valedictory address. Frederick Quincy Graybeal, Jr., also a graduating senior, was organist for the service.

* * *

Richard I. Katz of Baltimore has been awarded the annual Frank L. Engel Scholarship in Endocrinology by Duke University Medical Center.

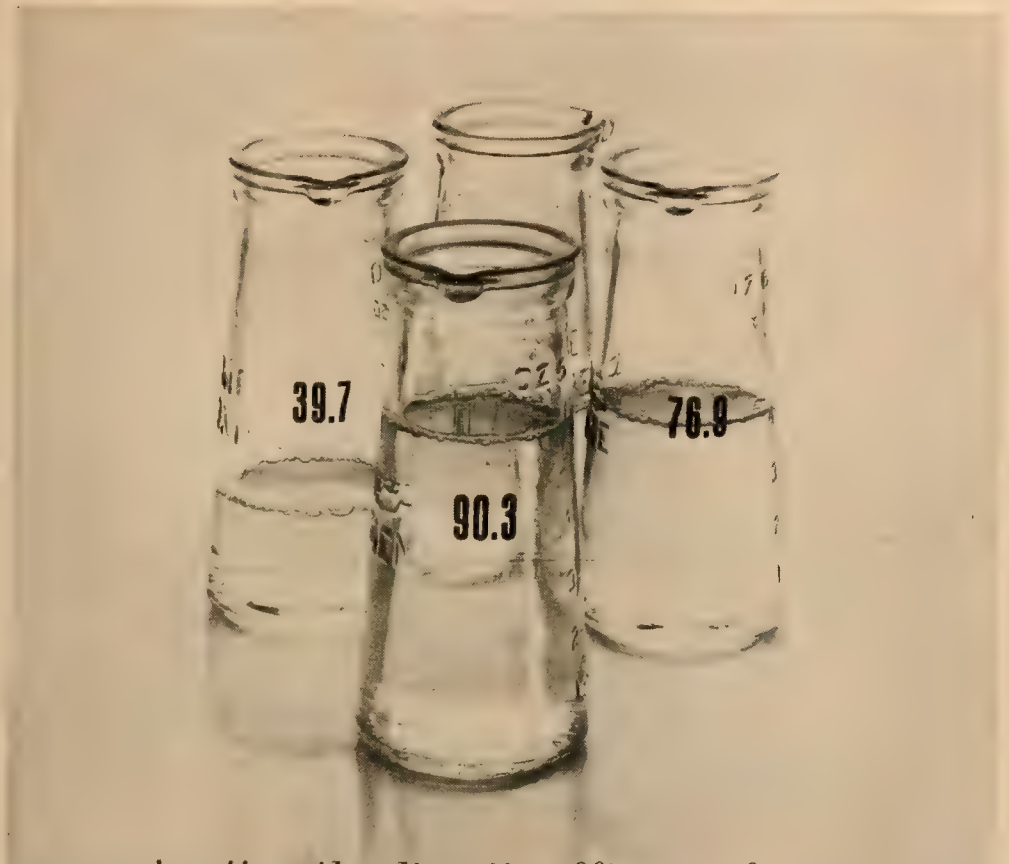
A senior medical student, Katz was selected as "the young man in his class who showed the most promise in the field of endocrinology," according to the Engel Scholarship Committee who made the announcement.

Aim of the award is to provide an opportunity for an outstanding medical school undergraduate at Duke to participate in research and clinical study in the division of endocrinology.

This year's winner won the award on the basis of work done in the laboratory of Dr. Rubin Bressler in a study of fat metabolism. His study involved the production of energy in the body.

* * *

On July 1 Dr. Richard J. Lester, formerly chairman of the Department of Radiology at the



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*Gold, H., *et al*: Closed Panel Conference: Present Status of the Management of Congestive Failure and Advances in Diuretic Therapy, Journal of New Drugs, 1:177, July-August, 1961.

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IN BRIEF: ADMINISTRATION AND DOSAGE: One 2 mg. or 4 mg. tablet once or twice daily. In acute, severe decompensation, Mercuhydrin® (meralluride injection) may be necessary initially.

PRECAUTIONS: As with all effective diuretics, vigorous therapy may produce electrolyte depletion. Patients with severely reduced renal function should be observed carefully since thiazides may be contraindicated. Care should be taken with patients predisposed to diabetes or gout. Patients with a tendency to potassium deficiency, as in hepatic cirrhosis or diarrheal syndromes, or those under therapy with digitalis, ACTH, or certain adrenal steroids, also should be watched carefully.

SIDE EFFECTS: Nausea, flushing, constipation, skin rash, muscle cramps and gastric discomfort have been occasionally noted; rarely thrombocytopenia and bone marrow depression, photosensitivity, cholestatic jaundice, pancreatitis, perimacular edema, gout and diabetes have been caused by administration of thiazides.

CONTRAINDICATIONS: Complete renal shutdown; rising azotemia or development of hyperkalemia or acidosis in severe renal disease; demonstrated hypersensitivity.

HOW SUPPLIED: Bottles of 100 and 1000 tablets.

Medical College of Virginia, assumed similar responsibilities at Duke.

A native of New York City, Dr. Lester succeeds Dr. Robert J. Reeves, who will devote full time to his teaching and research duties as professor of radiology at Duke.

Medical School Dean William G. Anlyan described Dr. Lester as "a man with proven leadership qualities," pointing out that he has built an outstanding department of radiology in less than four years at the Medical College of Virginia.

The new departmental chairman is widely known for his interest and skill in diagnosing heart disorders. He is the author of nearly 40 articles in his field.

Dr. Lester received his A.B. from Princeton University in 1946 and his M.D. from the College of Physicians and Surgeons, Columbia University, in 1948. He interned at the New York Hospital, then served a four-year residency in radiology at Stanford University Hospital before joining the U.S. Air Force as a captain.

* * *

A staff member of the Duke University Medical Center has been elected to a high-ranking post with the American Federation for Clinical Research.

Dr. Rubin Bressler was picked as national councilor at large by the research group during its annual meeting at Atlantic City. The federation has only five national councilors. One is elected each year.

Two other Duke faculty members were elected to membership in another elite honorary organization in simultaneous sessions at Atlantic City.

Dr. Samuel J. Friedberg and Dr. Roscoe R. Robinson were elected into the American Society for Clinical Investigation, a group that honors outstanding young medical investigators.

All three men hold the faculty rank of assistant professor of medicine at Duke.

* * *

Dr. James Harp and Dr. Brett Gutsche, both third year residents in anesthesiology at Duke University Medical Center, have been named joint first place winners in a national essay contest for resident doctors. The announcement was made by Dr. Ronald Stephen, professor and chief of the division of anesthesiology at Duke.

Title of the first-prize paper was "The Effects of Anesthetic Drugs on Hyperbaric Oxygen Toxicity."

The essay will be presented before the annual meeting of the American Society of Anesthesiologists, sponsor of the competition, in Denver, Col., during October.

* * *

Some 30 boys and girls from across North Carolina assembled at Duke University Medical Center on June 14 for a month-long speech clinic for cleft-palate children.

Dr. Galen Quinn, professor of orthodontics, directed the program, which emphasized speech therapy and diagnosis for surgical, orthodontic, and psychological treatment.

Also participating in the summer program was Dr. Kenneth L. Pickrell, professor and chief of the division of plastic and maxilofacial surgery; and Dr. Raymond Massengill, director of speech pathology.

* * *

Dr. R. Frederick Becker, associate professor of anatomy at Duke, and his research associate, J. Edward King, have been studying nicotine absorption during pregnancy and its effect on the young, under a grant from the Council on Tobacco Research.

In laboratory tests with rats, they have found that nicotine administered during pregnancy in doses comparable to that found in pack-a-day smokers "does little to alter the course of pregnancy, or to damage" either mother or baby.

If the nicotine dosage were doubled or tripled, however, the researchers concluded that the "consequences are grave" for both mothers and offspring.

But even under the heavy dosage, the chemical tended to delay birth rather than speed it up as reported in clinical studies. Nicotine in heavy doses also apparently caused convulsions in many of the mother rats, led to early death in many of the baby rats, and did induce smaller than normal infants.

Dr. Becker quickly points out that what happens in rats is not necessarily analogous to what happens in humans.

He also notes that clinical studies on the relationship between smoking mothers and small, premature babies have been consistent. But there is no proof that smoking is the causative factor, he said. Controlled laboratory studies are needed to properly evaluate the effect of nicotine.

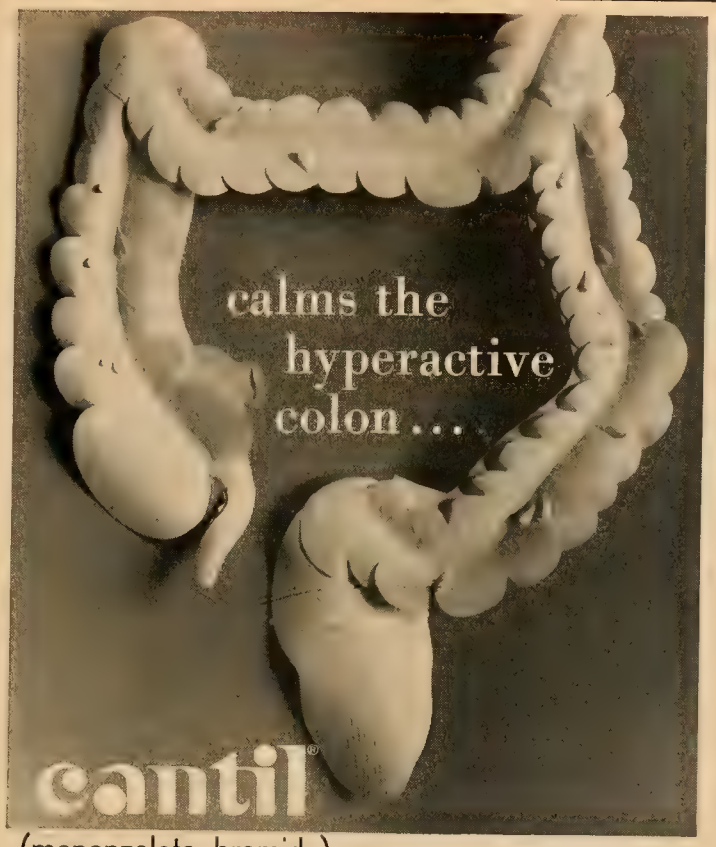
* * *

Dr. Philip Handler of Duke University presented scientific papers this summer in Amsterdam, Jerusalem, and Bellagio, Italy.

The James B. Duke Professor and chairman of the Department of Biochemistry attended the International Symposium on Flavoproteins in Amsterdam in June. He discussed new research data on enzymes.

Dr. Handler delivered the feature address on "Science and Public Policy" at a June symposium on biology and medicine in Jerusalem, Israel. He was also the official representative of the National Science Foundation of which he is vice chairman.

In Bellagio, Italy, July 12-16, he presented two scientific papers at the International Symposium on Active Sites of Enzymes. His papers were similar to those presented in the two previous meetings.



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"In 40 of 44 cases of irritable or spastic colon, Cantil [mepenzolate bromide] or Cantil with Phenobarbital reduced or abolished abdominal pain, diarrhea and distention and promoted restoration of normal bowel function . . . Cantil [mepenzolate bromide] proved to be singularly free of anticholinergic side-effects. Blurring of vision or dryness of the mouth were occasionally seen and were usually managed with a reduction in dosage. Urinary retention, noted in two cases was eliminated in one by reducing dosage."[1]

IN BRIEF:

One or two tablets three times a day and one or two at bedtime usually provide prompt relief. Cantil with Phenobarbital may be prescribed if sedation is required.

Dryness of the mouth or blurring of vision may occur but it is usually mild and transitory. Urinary retention is rare. Caution should be observed in prostatic hypertrophy—withhold in glaucoma. Cantil with Phenobarbital is contraindicated in patients sensitive to phenobarbital.

Supplied: CANTIL (mepenzolate bromide)—25 mg. per scored tablet. Bottles of 100 and 250.

CANTIL with PHENOBARBITAL—containing in each scored tablet 16 mg. phenobarbital (warning: may be habit forming) and 25 mg. mepenzolate bromide. Bottles of 100 and 250.

1-Riese, J.A.: Amer. J. Gastroent. 28:541 (Nov.) 1957

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Dr. Joseph A. C. Wadsworth, an eminent New York ophthalmologist, has assumed his duties as new chairman of the Department of Ophthalmology at Duke. He succeeds Dr. Banks Anderson, Sr., who will continue teaching and practicing in his capacity of professor of ophthalmology.

Dr. Wadsworth holds an M.D. degree from the Duke University School of Medicine. He is currently a clinical professor of ophthalmology at Columbia University. He also is attending ophthalmologist at the Presbyterian Hospital, the Vanderbilt Clinic, consultant to the New Rochelle Hospital, and attending surgeon in ophthalmology at the Roosevelt Hospital, all in New York.

Dr. Wadsworth is the author of many publications relating to eye surgery. He is a member of a dozen state and national medical societies Before studying at Duke, he received the A.B. degree from Davidson College.

Edgecombe-Nash Medical Society

At the May meeting of the Edgecombe-Nash Medical Society, members heard a report of North Carolina State Medical Society happenings by local delegates to the Annual Session, Drs. R. D. Kornegay and K. D. Weeks.

"The most important action taken," according to the report, "was giving Negroes full membership in our State Medical Society and leaving it up to the component county societies to do as they see fit."

With regard to medical care and hospital facilties, Dr. Weeks stated later in his report: "In order to carry out our obligations in this matter, and particularly so that we will not be left entirely out of the planning and ultimately told what our needs are . . . I strongly recommend that the president of this society appoint a committee to be designated at the Medical Care and Hospital Planning Committee to begin work immediately on this assignment . . ."

In compliance with the recommendation, Dr. Leon W. Robertson, president, appointed the following committee: Dr. K. D. Weeks, chairman; Drs. Lloyd Bailey, O. D. Bell, R. D. Kornegay, C. T. Smith, John Whaley, Larry High, J. A. Whitaker, and Julian Warren.

News Notes from the North Carolina Heart Association

Dr. Robert Cordell, assistant professor of surgery at Bowman Gray School of Medicine, has been named vice-president and president-elect of the North Carolina Heart Association.

The Winston-Salem surgeon was director of surgical research at Bowman Gray from 1957 to 1959. He has served as chairman of the state heart group's research committee since 1963.

* * *

William C. Friday, Chapel Hill, president of the University of North Carolina, has been named state chairman of the 1966 Heart Fund campaign, the North Carolina Heart Association announces.

Friday succeeds Mrs. J. Spencer Love of Greensboro, who headed the highly successful 1964 and 1965 drives in North Carolina.

North Carolina Tuberculosis Association

New officers for the North Carolina Tuberculosis Association and the North Carolina Thoracic Society were elected at concurrent meetings held in Winston-Salem in April.

Dr. D. Hilton Seals of Sylva is the new president of the NCTA, and Dr. Herbert A. Saltzman heads the North Carolina Thoracic Society. They succeed Coite H. Jones of Raleigh and Dr. J. Mac Hester of Wilson respectively.

Dr. W. H. Gentry of McCain is president-elect of the North Carolina Tuberculosis Association.

Dr. Isaac Manly of Raleigh is vice president of the North Carolina Thoracic Society.

* * *

Western Union has been named a depository for memorial gift contributions to the Heart Fund in North Carolina, the North Carolina Heart Association made public in a Memorial Day announcement. The statewide plan will become effective on September 1, 1965.

The agreement between Western Union and the state heart group specifies that persons wishing to make memorial gifts to the Heart Fund may do so at Western Union offices in some fifty town and cities in the state, Hargrove Bowles, Jr., Heart Association board chairman advised.

Contributors will pay 30 cents to Western Union, in addition to the amount of the contribution, to cover costs of collecting and remitting funds. Each contributor will receive a receipt for his tax records; memorial gifts to the Heart Fund are tax-deductible.

Contributors will also receive a card which will be mailed to the family of the person in whose memory the memorial gift is being made, according to Bowles.

The North Carolina agreement with Western Union, first in the nation, will make it easier for North Carolinians to make memorial contributions to the Heart Fund and will speed Heart Association acknowledgements of such gifts to the next-of-kin.

Hospital Care Association

American Blue Cross membership has soared past the 60 million member mark.

A report from the Blue Cross Association, the national organization for the 77 Blue Cross Plans in the United States and the four in Canada, showed that the new records had been set as of



more complete relief for the "dyspeptic"

DACTILASE®

Dactilase provides comprehensive therapy for a wide range of digestive disorders. Its antispasmodic and anesthetic actions rapidly relieve pain and spasm. Dactilase decreases hypermotility without inducing stasis. In addition, it supplies digestive enzymes to help reduce bloating, belching and flatulence. Dactilase does not interfere with normal digestive secretions. Very often it can be a most useful answer to the dyspeptic's needs.

DACTILASE: Each tablet contains: Dactil® (piperidolate hydrochloride), 50 mg.; Standardized cellulolytic* enzyme, 2 mg.; Standardized amylolytic enzyme, 15 mg.; Standardized proteolytic enzyme, 10 mg.; Pancreatin 3X** (source of lipolytic activity), 100 mg.; Taurocholic acid, 15 mg.

*Need in human nutrition not established. **As acid resistant granules equivalent in activity to 300 mg. Pancreatin N.F.

Side Effects and Contraindications: DACTILASE is almost entirely free of side effects. However, it should be withheld in glaucoma and in jaundice due to complete biliary obstruction.

Administration and Dosage: One tablet with, or immediately following each meal. Tablets should be swallowed whole.

Supplied: Bottles of 60 and 250.

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the third quarter, 1964—the latest date for which complete national statistics are available. Final 1964 figures will raise the totals.

In North Carolina, Hospital Care Association of Durham added 21,638 new members to reach a record enrollment total of 485,000 at the year's end.

The United States figures include Puerto Rico where 135,293 persons are covered by Blue Cross.

Eighteen Blue Cross Plans have more than a million members. They include Baltimore, Boston, Chicago, Cincinatti, Cleveland, Dallas, Detroit, Indianapolis, Los Angeles, Milwaukee, New Haven, New York City, Newark, Oakland (California), Philadelphia, Pittsburgh, St. Louis and Washington.

More than half of the states have 20 per cent or more of their population enrolled in Blue Cross.

States having more than 40 per cent of their population enrolled were Colorado, Connecticut, Delaware, District of Columbia, Maryland, Massachusetts, Michigan, New Jersery, New York, Ohio, Pennsylvania and Rhode Island.

States having between 20 and 40 per cent enrolled were North Carolina, Alabama, Illinois, Indiana, Iowa, Kansas, Kentucky, Maine, Minnesota, Missouri, New Hampshire, North Dakota, Oklahoma, Tennessee, Utah, Vermont, Virginia, Wisconsin, and Wyoming.

National Conference on the Medical Aspects of Sports

The Seventh National Conference on the Medical Aspects of Sports, sponsored by the American Medical Association under the auspices of the AMA Committee on the Medical Aspects of Sports, will be held in Philadelphia, Pennsylvania, at the Benjamin Franklin Hotel on November 28, 1965. The Conference is held annually in conjunction with and on the first day of the Clinical Convention of the American Medical Association.

Those interested in receiving further information concerning the Conference should address the Secretary, Committee on the Medical Aspects of Sports, American Medical Association, 535 North Dearborn Street, Chicago, Illinois 60610.

American Academy of Pediatrics

Routine immunization of all children with measles vaccine has been urged by the American Academy of Pediatrics, the association of physicians certified in the care of infants, children, and adolescents.

The Academy's Committee on the Control of Infectious Diseases in a statement in the May issue of the Academy's News Letter said:

"Measles can be the next infectious disease to be eliminated from the United States if the presently available vaccines are widely used.

"The vaccines are safe and effective, production problems have been solved, and six competitive vaccines are now commercially available and are approved and licensed by the Division of Biologic Standards of the U.S. Public Health Service."

The Month in Washington

Continuing emphasis on vaccination against smallpox in the United States was urged by the AMA. Following announcement that a case of the disease had been discovered in Washington, D. C., the AMA declared that there was no basis for panic or alarm, and said that there was no need for emergency, mass vaccination campaigns.

The AMA said the effectiveness of endeavors of the American Medical Association, local medical societies, physicians, hospital administrations, and government health agencies to raise the level of immunity to smallpox through vaccination were challenged with the first case of smallpox reported in this country in 20 years.

"Because of the hazard of such importations of smallpox, a disease which can kill or maim, the AMA and others have advocated continuing vaccination programs in this country," the AMA said. "The danger was particularly emphasized over two years ago by Dr. Raymond L. White, director of the Division of Socio-Economic Activities of the AMA. Dr. White pointed out the need for 'defense in depth' through ongoing intensive vaccination programs for those who are apt to contact international travelers, and those who meet or treat the sick, in addition to the general public programs."

* * *

The Supreme Court held that Connecticut's 1879 law forbidding use and prescription of contraceptives is unconstitutional.

The majority in the 7-2 opinion said that "a governmental purpose to control or prevent activities constitutionally subject to state regulation may not be achieved by means which sweep unnecessarily broadly and thereby invade the area of protected freedom."

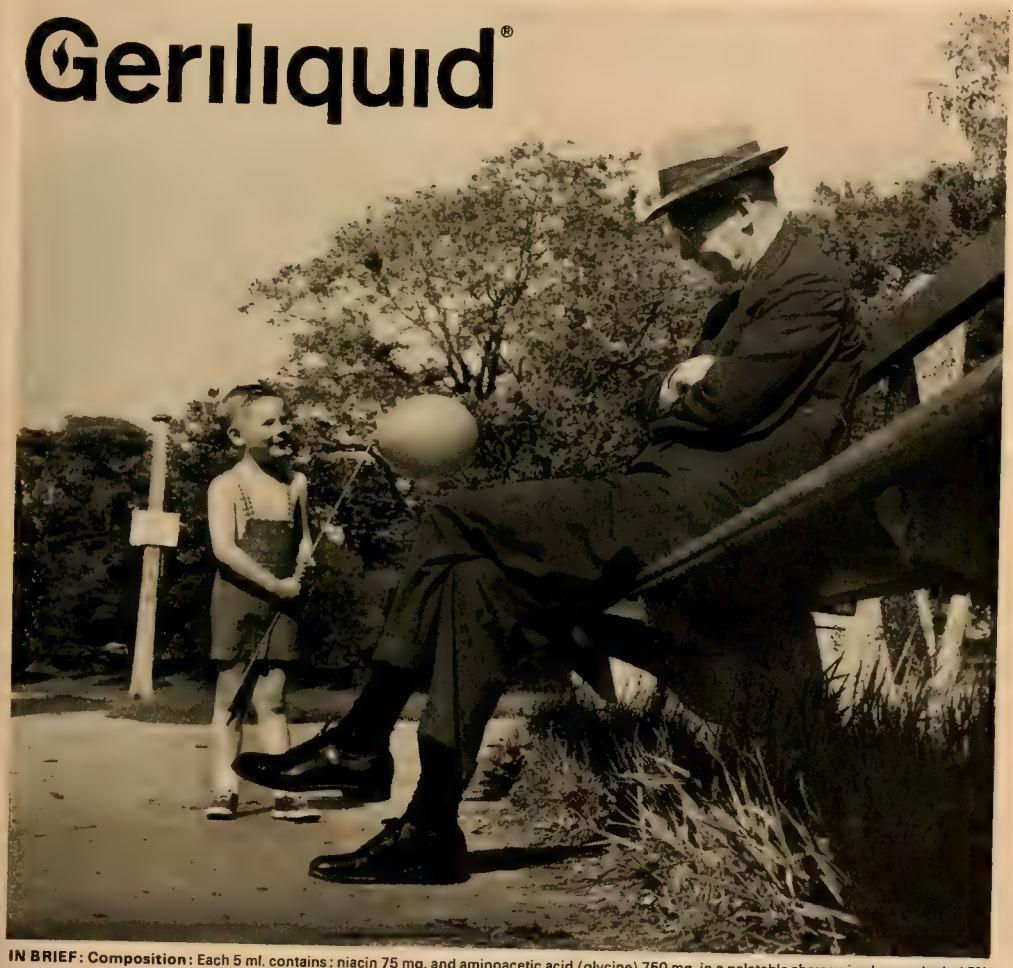
(Continued on page 318)

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provide rapid, sustained vasodilation for warmth and relief of pain, dizziness and faintness in patients with impaired peripheral circulation

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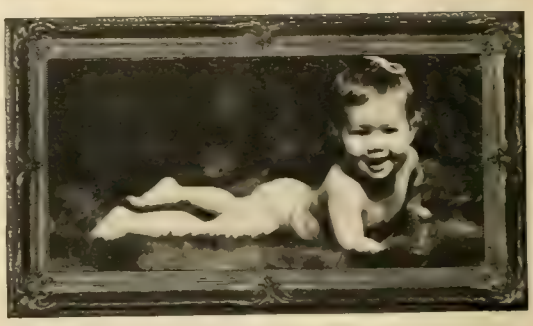
IN BRIEF: Composition: Each 5 ml. contains: niacin 75 mg. and aminoacetic acid (glycine) 750 mg. in a palatable sherry wine base; alcohol 5%.
Side Effects: Occasional lightheadedness or transient itching which may disappear with continued use. There are no known contraindications; however, caution is advised when there is concomitant administration of a coronary vasodilator.
Administration and Dosage: One or two teaspoonfuls 3 times a day before meals. If flushing is objectionable, dosage may be lowered. However, tolerance to flushing usually develops without loss of efficacy in regard to vasodilation.
Supplied: Bottles of 8 oz. and 16 oz.

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into a bundle of joy





COLIC, often in part a reflection of family tension, adds sleepless nights to patients' and parents' distraught days. Pediatric Piptal with Phenobarbital slows down spasm, diminishes pain and crying, improves feeding patterns . . . permits sleep and rest . . . for patient and family.

Pleasant tasting Pediatric Piptal with Phenobarbital is miscible in milk, formulas and fruit juices, and may also be administered by dropper directly on the infant's tongue. Dosage is 0.5 cc. 15 minutes before feeding; in severe cases, 1.0 cc. four times daily. High doses may occasionally cause constipation with tenesmus and, rarely, flushing without fever. Contraindicated in bowel obstruction or sensitivity to phenobarbital or anticholinergics. Available in 30 cc. dropper bottles, droppers calibrated to deliver 0.5 cc.

PEDIATRIC PIPTAL® WITH PHENOBARBITAL

each cc. contains: 6 mg. phenobarbital (warning: may be habit forming); 4 mg. Piptal® (pipenzolate bromide), and 20% alcohol in a pleasant-tasting solution.

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1—Pomeranze, J., and Gadek, R.J.: Am. Pract. & Digest Treat. *8*:73-77 (Jan.) 1957
2—Asher, L.M.: Am. J. Digestive Diseases *4*:272 (Apr.) 1959

PIPTAL®
(pipenzolate bromide)

PIPTAL®-PHB
(phenobarbital, 16 mg., pipenzolate bromide, 5 mg.)

IN BRIEF: PIPTAL—Each tablet contains 5 mg. pipenzolate bromide, PIPTAL-PHB—Each tablet (or 5 cc. of elixir) contains phenobarbital (warning: may be habit forming) 16.0 mg., Piptal (pipenzolate bromide) 5 mg. The elixir contains alcohol 20%.

Side Effects: Dry mouth, blurring of vision or drowsiness may occur.

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Annual Convention—Asheville

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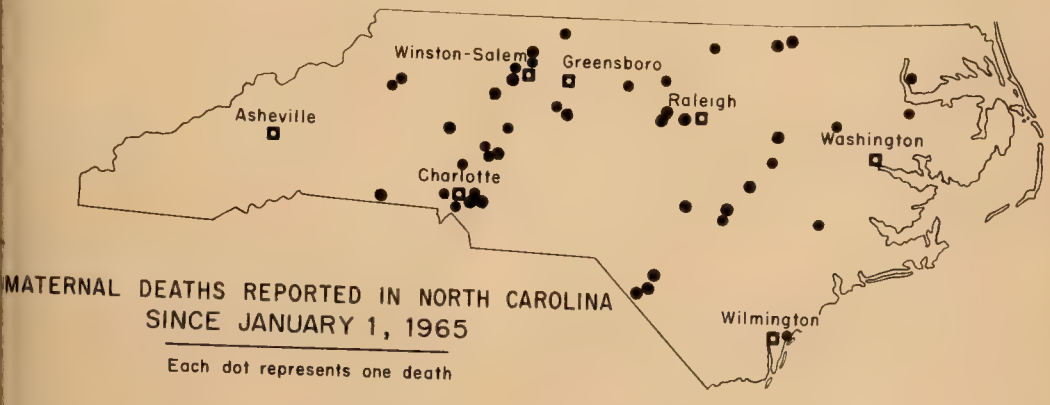
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MATERNAL DEATHS REPORTED IN NORTH CAROLINA SINCE JANUARY 1, 1965

Each dot represents one death

The Month in Washington

(Continued from page 312)

The challenge to the Connecticut law was made by the State's Planned Parenthood League. It stemmed from the conviction of Mrs. Estelle T. Griswold and Lee Buxton, M.D., on charges of violating the law by operating a birth control clinic.

An attempt to challenge the law was made in 1961, but the Supreme Court refused to consider the issue then because no arrests had been made.

"Would we allow the police to search the sacred precincts of marital bedrooms for telltale signs of the use of contraceptives?" the opinion said. "The very idea is repulsive to the notions of privacy surrounding the marriage relationship."

* * *

A Senate Aging subcommittee recommended that self-employed persons be given special tax incentives to encourage them to take part in private pension programs. The recommendation was included in a report by the Subcommittee on Employment and Retirement Incomes which held four days of hearings on the subject in March.

The subcommittee endorsed two tax changes that the American Medical Association had urged in a statement to the group earlier this year. One would remove present restrictions in the Smathers-Keogh law that allows tax deferrals on money invested in pension plans by self-employed persons, including physicians. The other would allow physicians who form professional groups to have their business income treated for Federal tax purposes the same as other business corporations.

* * *

The Food and Drug Administration has proposed that foods intended to regulate the intake of fats be accurately labeled to show the amounts and classes of fatty acids, including polyunsaturates, contained in them.

* * *

The drug industry is establishing a foundation to help promote "scientific and medical research." The foundation being established by the Pharmaceutical Manufacturers Association will plan and initiate research as well as collect and distribute results of the research. It also expects to help finance research projects, the PMA announcement said. The foundation will begin work on a modest scale, "first assembling data on what now is being done in the field by industry, research and educational groups," PMA said.

Classified Advertisments

Staff Physician—for position in established Medical Dept. of large Piedmont North Carolina industry. Liberal benefits, salary commensurate with experience and qualifications. Write full personal details and availability. An equal opportunity employer. Reply in care of the Journal, P. O. Box 790.

WANTED—Staff Physicians (3). General Practitioners 45 or under to assist Attending Staff and General Practice Residents in 260 bed general hospital. Annual appointment preferred $15,000-$17,500 depending on training and experience. Contact Medical Director, San Luis Obispo General Hospital, San Luis, Obispo, California. Phone: 805-543-1500.

For Lease or Sale: Office space, Medical Village Inc., Burlington, N. C. Dr. J. W. Lynn, Jr.

Physician Wanted: Physician interested in general practice; excellent opportunity. Piedmont section. Vacating office for residency. If interested please contact Post Office Box 11438 Charlotte, North Carolina.

Needed — general physician — family internship by four-man group in growing rural program in West Virginia. Modern clinic facilities, regular visiting specialist consultant staff, scheduled training and vacation periods, foundation sponsorship, no investment required. Starting net income range $14,000 through $18,000 depending on qualifications. Reply in care of the Journal, P. O. Box 790, Raleigh, N. C.

For Sale: Fischer 75 MA X-ray-Fluoroscopy Unit and all accessories. Fischer Diathermy Burdick EK2 Electrocardiograph. C. T. Harris, Jr., M.D., 425 Roberts Street, Salisbury, N. C.

General Practitioner—excellent opening for additional general practitioner in Tarboro, North Carolina; fully accredited hospital adjacent to modern clinic building; attractive remuneration and early partnership. Contact Mr. R. M Thomas, Clinic Manager, Tarboro Clinic, Tarboro, North Carolina.

August, 1965
Vol. 26 No. 8

NORTH CAROLINA MEDICAL JOURNAL

PUBLISHED MONTHLY BY THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA

IN THIS ISSUE:

Schedule of Commission & Committee Appointments, 1965-66

A Russian Look at Psoriasis Treatment

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Amytal is a moderately long-acting barbiturate that takes the edge off daytime anxiety and tension without significant change in mood and attitude. Since Amytal is metabolized in the liver within twenty-eight hours, overlapping of effect is minimized, and renal damage does not constitute an absolute contraindication to the drug.

Contraindications and Precautions: Persons with a history of porphyria should not receive barbiturates in any form. Administration in the presence of uncontrolled pain may produce excitement. Amytal should be used with caution in patients with decreased liver function, since a prolongation of effect may occur. Warning—May be habit-forming. **Side-Effects:** Idiosyncrasy or allergic reactions to the barbiturates may occur. **Dosage:** Doses should be individualized for each patient. The usual adult sedative dosage ranges from 30 mg. (1/2 grain) to 50 mg. (3/4 grain) two or three times daily.

Additional information available to physicians upon request. Eli Lilly and Company, Indianapolis, Indiana.

AMYTAL® AMOBARBITAL

Lilly

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Table of Contents, Page II

NTZ Nasal Spray relieves hay fever symptoms on contact

Fast symptomatic relief from seasonal hay fever comes in the convenient NTz Nasal Spray bottle. Two sprays quickly relieve itching and decongest the nasal membranes on contact. The first spray of NTz shrinks the turbinates, helps restore normal nasal ventilation and breathing. After a few minutes a second spray enhances sinus ventilation and drainage.

NTz Nasal Spray reduces excessive rhinorrhea without unpleasant dryness. It is well tolerated by delicate respiratory tissues. NTz also provides relief in head colds, perennial rhinitis and sinusitis.

NTz's carefully balanced formula relieves three ways: with a decongestant, a topical antihistamine, and an antiseptic wetting agent.

Neo-Synephrine® HCl 0.5%, a decongestant of unexcelled efficacy to shrink nasal membranes.

Thenfadil® HCl 0.1%, a topical antihistamine to help relieve itching.

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NTz is supplied in leakproof, pocket-size, spray bottles of 20 ml. and in bottles of 30 ml. with dropper.

Winthrop Laboratories, New York, N. Y. 10016

NTZ, Neo-Synephrine (brand of phenylephrine), Thenfadil (brand of thenyldiamine), and Zephiran (brand of benzalkonium, as chloride, refined), trademarks reg. U.S. Pat. Off.

Hay fever... a summer hazard

prescribe NTZ® Nasal Spray



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NORTH CAROLINA MEDICAL JOURNAL

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VOLUME 26 AUGUST, 1965 NUMBER 8

Methods of Treating Psoriasis in the USSR

ANATOLI KARTAMYSHEV

Though psoriasis has been known since the time of Hippocrates, the origin of this skin disease remains a mystery to science.

According to the different theories held by Soviet scientists, the origin of psoriasis is either neurogenic, toxic, endocrine, infectious, or due to metabolic disbalance.

The majority of Soviet dermatologists connect it with disbalanced nervous metabolism. We have a quantity of experimental data to this theory proposed by the founder of Soviet dermatology, A. Polotebnov. After studying 73 cases of psoriasis, he observed some disorders of the nervous system in 66 of them, three others were connected with typhoid, and one with scarlet fever. In only three cases could no causes of psoriasis be detected.

Several methods of treating psoriasis have lately been used in the USSR. Good results are obtained with triamsynalon (a corticosteroid). Soviet dermatologists have obtained successful results by treating psoriasis with large doses of vitamin B_{12} combined with folic acid.

The good effect of aminopterine in cases of psoriasis has often been noted in Soviet clinics, but this drug does not prevent relapses of the disease and has certain toxic properties, thereby limiting its use.

A bacteriological substance called pyrogenal (a liposaccharide) was proposed in 1954 as a remedy against psoriasis by H. Plamelyem, corresponding member of the USSR Academy of Medical Sciences. Intramuscular injections of pyrogenal cause a fever which begins one and a half or two hours after the injection and lasts from six to eight hours, promoting the reconstruction of metabolic processes in the organism. The acute advance of psoriasis is almost completely halted by five to ten injections of pyrogenal.

For editorial comment see page 344

The regular use of pyrogenal in medicine was officially permitted in 1963; in 1964 it was put into regular production.

Last year, at a symposium on the use of pyrogenal, L. Alchangyan communicated the results of treatments applied to 102 patients, who had been divided into two groups. Seventy-three were treated by intramuscular and intravenous injections of pyrogenal. Clinical cures were noted in 28 cases, considerable improvement in 23, and improvement in 20. The medicine had no effect in two cases complicated by other diseases.

The 29 patients of the second group were given a combined treatment of pyrogenal and ointments. Clinical cures were noted in 19 cases, considerable improvement in seven, and improvement in three. Medical observations showed that forms of psoriasis with a heavily localized rash on the back of the hands and on the insteps, usually difficult to cure, were easily cured by a course of treatment with pyrogenal. According to the statistical data for the past 30 years used by the authors, the proportion of clinical cures in cases of psoriasis has risen from a little over 10 per cent to 70 per cent after the use of pyrogenal. The

Head of the Dermatological Chair, Central Institute of Advanced Medical Training, Union of Soviet Socialist Republics.

Submitted by Novosti Press Agency (APN)

results obtained by combining it with ointments are still better.

Ointments containing chrysarobine, an old remedy for psoriasis, often caused irritation of the skin. The Soviet dermatologist L. Mashkileison has proposed a combined method of treatment which is very effective against psoriasis and prevents dermatitis.

After morning bath or shower the patient's skin is irradiated with ultraviolet rays, following which chrysarobine ointment is applied to the affected parts.

Rybakov's psoriasin is an ointment containing emulsive solidol made of colza oil and refined mineral oil containing trichlorethylamine in a solution of 1:40,000 or 1:100,000. The clinical results of treatments with psoriasin given over a long period of time have recently been summarized.

The method of treatment was the same in all cases: the ointment was rubbed in twice on the affected sections of the skin and washed off with soap in a bath or shower taken every third day. On old centers of infection, usually located on the shins, the ointment was covered with waxed paper.

As a rule, the rash disappeared in the course of four to eight weeks, leaving a slight pigmentation which in turn disappeared after two months. No irritation of the affected or healthy skin was ever observed and no aggravation of the basic process or pathological changes in the composition of the blood and urine were noted.

Improvement was obtained in 195 of the 255 cases; the patients considered themselves practically cured. In 56 cases of widespread psoriasis the rash disappeared completely; most of these patients were children or people in the early stages of the disease. In four cases only the treatment had no effect: patients with neglected forms of psoriasis.

Anthrasulphonic ointment, containing sulphophenolic and sulphocresolic ammonium, a lipid extract of coal tar on an autollanolin basis, proposed some years ago as a remedy against psoriasis, has proved very effective for all forms of the disease.

In the USSR mineral baths are one of the principal methods of treatment in psoriasis. On the Caucasian coast of the Black Sea patients are treated with sulphurated hydrogen water baths, in Tskhaltubo it is the radon springs that are helpful, and in Nefatalan oil refinery wastes are used.

An effective method has been proposed by the staff of the dermatological clinic in Kuibyshev (Middle Volga Region). It consists of injections of freshly boiled milk (5 milliliters) and doses of sodium bromide taken internally, administered for a week. This is followed by a 10-day treatment with a four-per-cent solution of ammonium chloride and a five-day treatment with methylene blue (the whole course of treatment repeated two or three times). The rash usually disappeared under the influence of this method, without any complications.

Soviet physicians attach great importance to diet. They advise the use of a very limited quantity of animal fat, and in some cases of psoriasis—its complete elimination (with the substitution of vegetable oil).

They believe that the best means of preventing psoriasis are a moderate diet, healthy mode of life, careful personal hygiene and systematic hardening of the organism.

Master Diplomacy in Patient Consent

The rigid legalistic terms of the 1963 (drug) regulations have alerted legal consultants and administrators in every research organization in the country. Each man reads and has a different interpretation depending on his background. Patient consent for the trial of new drugs is now strongly suggested and is so fraught with ethical, sociological, and educational problems that the clinical pharmacologist must become a master diplomat if he wasn't born this way.—Carl C. Pfeiffer, Ph.D., M.D., in *Journal of New Drugs*, 4:6, (Nov-Dec) 1964.

Evaluation of Diagnostic Tests

The Concept of Inverse Probability

Oscar Kanner, M.D.*

Oteen

It is an inveterate custom to express the results of many diagnostic laboratory tests as "positive" or "negative". The original meaning of these terms was this: A positive result of a diagnostic test for some condition should indicate the presence of a certain condition, a negative result its absence. When it was admitted that not all "positives" corresponded to the presence of the condition in question, and that the absence of this condition would not be assured by a "negative" result, syphilographers substituted the term "reactive" for positive and "non-reactive" for negative. This has not improved any method. It only tends discreetly to emphasize hazards in the interpretation of test results.

Most methods have been evaluated with regard to "sensitivity" and "specificity." Consider for instance serologic tests for syphilis. The sensitivity was defined as the fraction of the cases of syphilitic patients with "reactive" test results. The specificity was defined as the fraction of cases of non-syphilitics with "non-reactive" results. For instance, Cannefax and Garson[2], in their evaluation of the Reiter Protein Complement Fixation Test for syphilis, claim a sensitivity of 82.61% and a specificity of 98.86%. This is based on the findings of 632 reactives in 765 patients diagnosed as syphilitic, and 7 reactives in 608 patients considered non-syphilitic.

A high degree of specificity, such as about 99%, may inspire confidence in the interpretation of positive test results. When only 1 out of every 100 non-affected patients shows a positive result, most members of the medical profession seem to think that the chance of a positive test result would insure the diagnosis on a 99% confidence level. This is wrong, as will be demonstrated, though the idea that only 1 out of 100 non-syphilitics would yield a positive test result appears to be justified. This number is a constant, independent of the rate of syphilis in the population subjected to the test.

For editorial comment see page 344

The utility of any message (and test reports are messages) lies in its virtue of influencing decisions. Here the relative weight of test results should determine the degree of confidence in diagnostic decisions. If no significant weight is assigned, the test becomes redundant. Therefore, weighting is necessary. The weight to be assigned to a positive test result depends on the probability that a positive test result indicates the presence of syphilis. A false test result will exert an influence generally to the disadvantage of the tested person. This may be slight or serious, but some measure of damage is unavoidable. One false positive in 100 non-syphilitics seems to be a small risk. It represents the estimated risk that any non-syphilitic be mistaken for a syphilitic, but is unrelated to the risk taken with a particular individual subjected to the test and usually differs from it significantly. What we do need for the weighting is the percentage of false positives among all positives in any tested group. This rate depends not only on specificity and sensitivity figures, but also on the rate of syphilis in the tested population, as will be shown in full detail.

Consideration of specificity and sensitivity only is unrealistic, because it considers separately the population of all syphilitics and all non-syphilitics wherever they may be instead of the population actually at hand.

Zeisler[5] has already pointed out that the percentage of non-syphilitics having false-

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positive reactions should be distinguished from the percentage of false positives among all positives. *Mutatis mutandis,* this holds for syphilitics with negative reactions.

The following fictitious example will clarify the issue. The numerical values were selected for convenience.

Suppose the existence of some diagnostic test for a disease D. The test is assumed to be 50% sensitive and 95% specific. What is the probability that an individual with a "positive" test result suffers from D? The given data imply:

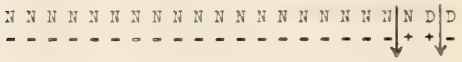
1. One of every 2 D's yields a "positive" test result (50% sensitive).

2. One out of every 20 non-D's yields a "positive" test result (95% specific).

These two statements are insufficient to give the desired answer. We must have information about the rate of D in the population. Assume, for instance:

3. Two out of every 22 persons are D's.

There is an easy graphic solution. Let N stand for the absence of D and consider the following scheme:



The scheme fulfills the conditions of the problem. We observe that of every two "positive" test results, one is false. Therefore, 50% of all positive results are false ones though the specificity is 95%. On the other hand, there are 20 negative test results with only 1 false one. Hence, the incidence of false negatives is 1 out of every 20 negatives, or 5% only.

If the incidence of D decreases, more false positives will be among the positives. Assume, for instance, that we have 40 instead of 20 N's with the 2 D's. Then two instead of one of them would be associated with the symbol +. There would now be 3 positives, 2 of them false. On the other hand, there would now be 39 negative reports with only 1 of them false. This should be compared with the classification of the test as 50% sensitive and 95% specific.

The preceding example may prepare for understanding the concept of inverse probability. When sensitivity and specificity are established by surveying a large group of people affected with D and another large group free from it, these questions can be settled: What is the probability that a D is associated with a positive test result? What is the probability that an N is associated with a negative test result? This presupposed a priori knowledge of the diagnosis, and the test itself would be redundant with respect to diagnostic purposes. All that could be obtained would be an enlargement of the samples which were originally used to obtain estimates of sensitivity and specificity. In practice the questions must be different ones. We must ask: What is the probability that an individual with a positive test result is affected with D? These are inverse probabilities, different from the previous ones. The concept was established by Bayes[1] over 200 years ago. Its general aspects are considered in the appendix.

We may now return to consideration of the Reiter Protein Complement Fixation Test. It represents serology at its best, because of the high (nearly 99%) specificity and its relatively great sensitivity. Since so many people seem to believe that the inverse probabilities are similar to the direct ones, we shall now determine what the incidence of syphilis would have to be to justify the idea that a positive test would indicate the presence of syphilis with a probability equal to the established specificity, 99% in this case. We take this probability to be $p=0.99$, and the sensitivity $\alpha=0.83$. Substitution of these values into equation 3 of the appendix shows that for this confidence level of 99%, deceptively suggested by the specificity of 99%, an incidence of syphilis of 58.5 per cent—that is, a rate of 58,500 cases per 100,000 in the population—would have to exist. For lower rates, the confidence level is lower. To have but 50% assurance that a positive test represents syphilis, the incidence would have to be over 1%, a rate of more than 1000 per 100,000 in the population under consideration. Table 1 depicts the relationship between the confidence level and the associated required incidence. There we see that with a rate as high as 1373 per

Table 1

Relationship Between Confidence Level and Required Incidence

Confidence Level (%)	Required Rate*†
99	58,541
95	20,993
90	11,155
80	5,279
70	3,148
60	2,046
50	1,373
40	920
30	593
20	347
10	154

*Number of syphilitics per 100,000 persons

100,000, half of all the positive test results would still be false ones.

To convince anyone who may be skeptical, the following model may be appropriate. Imagine a "black box" containing 100,000 elements of which some carry an attribute A, such as a peculiarity which is not present in the rest. Assume a telemetric device capable of contacting each of the elements, of recognizing the presence or absence of A, and of transmitting this information by a signal consisting of one of two symbols. The device is sensitive enought to detect about 87% of the elements with the attribute, and only about once per every 100 contacts with elements devoid of A would it falsely signal its presence. Imagine now that the detector contacts every element once and that the corresponding signals are recorded.

Table 2 affords a comprehensive view of this situation. Column 1 represents the stipulated true incidence of the attribute A. The entries in column 2 are the number of times the sensing device would indicate, rightfully and wrongfully, the presence of A. Column 3 reveals how many of these indications would be false positives among all positives. Columns 5, 6 and 7 are equivalent to the preceding three columns, but in terms of negatives.

When all the elements of the population are affected with A, all positives must be true ones. When none of the population is affected, all negatives must be true ones. When nearly all are affected with A, a very small percentage of the positives will be false, in contrast to a high incidence of false negatives among all negatives. This phenomenon is reversed when the rate of A is small.

Table 2

Effect of True Incidence on Overall Accuracy

1	2	3	4	5	6	7
True Rate of A*	Total Positives	False Positives	% False Positives Among All Positives	Total Negatives	False Negatives	% False Negatives Among All Negatives
100,000	82,610	0	0.00	17,390	17,390	100.00
80,000	66,318	230	0.35	33,682	13,912	41.30
60,000	50,026	460	0.92	49,974	10,434	20.88
40,000	33,734	690	2.05	66,266	6,956	10.50
20,000	17,442	920	5.27	82,558	3,478	4.21
10,000	9,296	1,035	11.13	90,704	1,739	1.92
8,000	7,667	1,058	13.80	92,333	1,391	1.51
6,000	6,038	1,081	17.90	93,962	1,043	1.11
4,000	4,408	1,104	25.05	95,592	695	0.73
2,000	2,779	1,127	40.55	97,221	348	0.36
1,000	1,965	1,138	57.91	98,035	174	0.18
500	1,557	1,144	73.47	98,443	87	0.09
200	1,313	1,148	87.43	98,687	35	0.04
100	1,231	1,149	93.34	98,768	17	0.02
0	1,150	1,150	100.00	98,850	0	0.00

Sensitivity $\alpha = 0.8261$
Specificity $\beta = 0.9885$
Number per 100,000

Here are a few examples taken from Table 2, based on the continued assumption of 82.61% "sensitivity" and 98.86% "specificity". When the rate of A is 100,000 per 100,000, the record will show 82,610 positives and 17,390 negatives. All the positives will be "true" and all the negatives will be "false." At the other end of the table, where the rate of A is zero, 1,150 positives will appear, all of them false; there will be 98,850 negatives, all of them true. With a rate of 500 A's per 100,000 (0.5%) 1,557 positives appear, 1,144 of them false. This means that, in this case, about 2 out of every 3 positives are false.

For tests where the conventional "specificity" surpasses the conventional "sensitivity," it is commonly believed that a positive report carries more weight than a negative one. Inspection of Table 2 reveals that with a high incidence of the condition under consideration, positive test results are indeed more reliable than negative ones, but with lower rates the negative reports become more reliable than the positive ones.

Ordinarily the rate of the pathologic condition to be diagnosed or excluded is low. Take for an example recommended periodic health examinations, including exfoliative cervical cytology for the early detection of cancer. Assume optimistically such skill of the examiners that for every 100 women free of cervical carcinoma only 1 will be falsely suspected of having a malignant tumor, while 83% of existing malignancies are detected. This corresponds approximately to our Table 2. If we assume that 1 patient out of every 200 were the victim of a malignancy, then nearly 2 out of every 3 positives must be false ones. With an incidence of as much as 1 malignancy in every 25 patients, 1 out of every 4 positive results would still be a false one.

The presented results are unexpected, or even startling to many. Therefore, it may be appropriate to re-examine the underlying logical structure. From a set of premises, inferences are made and conclusions are drawn. If the conclusions appear to contradict experience, two, and only two, causes can be in play: (1) The assumptions are not realistic, (2) the inferences are not logically valid. If these two cases can be excluded, the appearance of contradicted experience is false.

There are three assumptions: (1) knowledge of the degree of sensitivity (83%, for instance); (2) knowledge of the degree of specificity (99%, for instance); (3) knowledge of the population rate of the condition pertaining to the test. The relevant information is based on actual experience with two complementary population subsets: one where every element is affected with the specific condition; the other, where every element is entirely free from it.

Take cervical carcinoma as an example. A large set of proven cases is subjected to the test. In this way a number representing the sensitivity is obtained. A large set free of the condition leads to knowledge of the specificity. The margin of error should be insignificant. (With syphilis the situation may be more complex but need not be discussed here). These assumptions cannot be replaced by significantly different ones. Their rejection would lead to a state of agnosticism and not enough to talk about would be left.

There is no doubt about the validity of the logical inferences. Though they are based on probability calculus, they can readily be verified by a simple process of counting, as was demonstrated above. It seems easier to tear out a mountain of the Alps with one's bare hands than to break a link in the chain of steps leading from the premises to the conclusions.

What is wrong with the conclusions? Perhaps we dislike them. Why are they unexpected to many people? Because few are familiar with the concept of inverse probability. Assume that a cause C produces an event E with a certain probability, say 90%. This does not afford knowledge about the inverse, the probability that the event E is caused by C. To determine this probability, knowledge of the probability of the presence of the cause C is required. (In our case, the cause C is the presence of a certain disease and the event E a positive test result.)

This is the essence of Bayes' theorem discussed in the appendix.

If, as we had to conclude, the appearance of contradicted experience is deceiving, how can such deception be maintained? Unrecognized *petitio principii* seems to be the cause.

Latent syphilis is characterized by the fact that it remains symptomless over extended periods of time. "Positive" serology may be the only indication of its presence. Tests are performed rather routinely. Some of the patients with false-positive results are even treated because of an erroneous diagnosis. Subsequently, this diagnosis is "confirmed" by the history of positive serologic test results and previous treatment. In this way. the number of false positives at hand is underestimated. Also, it must be remembered that their relative incidence depends upon the composition of the group considered non-syphilitic. Usually this group consists of relatively healthy individuals, less apt to yield false-positive test results than groups of non-syphilitics affected with various other conditions.

With exfoliative cytology, reliable estimates of the number of false positives are hard to come by. One must suspect that in this respect the results may be embellished by the mentioned *petitio principii*. Cervical cytology serves as an example. In the presence of a smear reported as positive, cervical biopsies are performed and a thorough search for an incipient cancer is made. Often the diagnosis of "carcinoma in situ" is reached. This makes the result, in the opinion of attending physicians, a true positive and contributes to an increase in the statistical sensitivity and specificity of the test. However, the clinical meaning of this form of carcinoma in situ is controversial and can be settled by clinical follow-up only. But there is a lack of acceptable control series because negative cases are, in general, neither subjected to biopsy nor appropriately followed. Also, every biopsy is likely to remove all of a carcinoma in situ if the specimen contains one. The inferences drawn from the histologic evidence are merely speculative.

Some years ago atypical gland proliferations at the borders of gastric ulcers were believed to be neoplastic and malignant. The incidence of this histologic feature was too high to be commensurate with the incidence of gastric malignancy, and the interpretations had to be revised accordingly. However, even if all these morphologically suspected lesions were true malignancies, the conclusions of this article would not be affected.

Discussion

For the statistical evaluation of any of the tests of the types discussed in this article, four points of view present themselves:

1. The overall accuracy.
2. Sensitivity and specificity alone.
3. The percentage of false positives (negatives) among all positives (negatives).
4. Information theory.

The first two are in general use, but unrealistic. The third is the one that is valid in practice. This can be demonstrated with a view to Table 2. For an example, we assume the true rate of A to be 500 per 100,000. This corresponds to 1144 false positives and 87 false negatives, a total of 1231 false reports and hence 98,769 true ones, an overall accuracy of nearly 99%. Depending on the rate of A, this measure of accuracy would vary between 83% and 99% and does not seem to be useful. Compare these figures with the fact that with the given incidence of 500, 2 out of every 3 positives are false ones.

Sensitivity and specificity alone are most often considered. This represents the probabilities (a) that among a population of non-A's a negative report appears, (b) that among a population of A's a positive report appears. It seems that we have put the cart before the horse, because what we really want to know is the reliability of a test report in the absence of a priori knowledge of the diagnosis. Sensitivity and specificity alone cannot give the answer to this question; they would answer only inverse questions such as these: A patient, presenting himself, is known beforehand to be syphilitic. What is the probability of a negative (positive) test result? Another subject is known beforehand to be non-syphilitic.

What is the probability of a positive (negative) test report? Obviously, knowledge of sensitivity and specificity could properly answer these questions, but only these questions. They could serve as an appropriate measure of test reliability only if it were known beforehand whether a patient is syphilitic or not. But in practice this is not the case.

To assess the reliability of diagnostic test results, it is necessary to gain experience with an adequate sample of some population composed of specifically affected and non-affected individuals subjected to a certain test. This yields a number of positive and negative test results. If it can be independently ascertained which patients are affected by the specific condition corresponding to the test and which are not, then, and only then, can the reliability of the test results be evaluated. For example, if of every 100 positive test results 20 were false, the probability that a subject with a positive result suffers from the corresponding disease would be 80%, regardless of the specificity and sensitivity of the method. Naturally, it must be assumed that the sample is always representative of the population and that the test performance is invariant.

Information theory tends to confirm these seemingly pessimistic views. The diagnostic test represents a noisy channel. The actual condition (absence or presence of a specific condition) is the intended message. The test result is the received message, somewhat different from the intended one. The cause of the difference is called noise. It destroys part of the information contained in the intended message.

By comparing the intended and received versions, it is possible to measure this loss of information. The required mathematical technique may be found in Khinchin[4]. For instance, in a previous example we assumed a sensitivity of 0.8261, a specificity of 0.9885, and a rate of 500 per 100,000. Calculation reveals that under these circumstances nearly half (about 48%) of the information contained in the intended message would be irretrievably lost by the noise in the channel.

The preceding considerations are not intended to criticize any of the diagnostic procedures, but users of these methods should be aware of the irrefutable facts presented in this article. The population rates, as used in this article, refer to populations not in an ethnographic sense, but in a statistical sense. Such populations are manifold and are determined by classes of cases subject to a certain diagnostic test at a certain place, at a certain time period. For instance, a population may consist of patients presenting themselves for some test related to a disease of which they have symptoms. One must expect that in such a class the incidence of the disease in question is higher than in a symptomless or mixed class. At any rate, the point is this: The conventional indications of sensitivity and specificity of a test must be complemented by some reasonable independent estimate of the incidence of the corresponding disease in the specific group of patients who are subjected to the test. With increasing disease rates, the reliability of the positive reports increases, but the reliability of the negative reports decreases. In some instances, even relatively unreliable positive reports may be useful for screening purposes. No general rules can be made, but it seems important to correct prevailing misapprehensions about sensitivity and specificity. This is the purpose of the article.

Summary

The customary consideration of diagnostic tests in terms of specificity, sensitivity, and overall accuracy is insufficient for their evaluation in practice. The questions to be answered are these: Given an individual with a positive (negative) test report, what is the probability of the presence (absence) of the disease for which the test was designed? To estimate these probabilities, an estimate of the incidence of the disease in the population subjected to the test is necessary. With relatively low disease rates, the percentage of false positives among all positives will be relatively high and the probability that an individual with a positive test result is afflicted with the disease correspondingly low.

Simple formulas are presented to calculate these probabilities for any given disease rate when specificity and sensitivity of a test are known. Tables are given to cover a practical case where the specificity is high (about 99%). It is shown that with lower disease rates, postive tests lose their diagnostic value, even when their specificity is high.

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Appendix

Assume a large population where a disease D exists. Its rate is known. A diagnostic procedure to detect D is applied.

Notation:

α—fraction of cases affected with D yielding postive tests

β—fraction of cases not affected with D yielding negative tests

η—relative incidence of D

p—probability that an individual with a positive test is affected with D

p'—probability that an individual with a negative test is affected with D

N—absence of D

The table below represents the total population.

	+	-	
D	$\alpha\eta$	$(1-\alpha)\eta$	↓
N	$(1-\beta)(1-\eta)$	$\beta(1-\eta)$	
	→		1

The sum of the marginal sums equals unity.

The fraction of true postives is $\alpha\eta$. To obtain the probability of a positive result being associated with the disease D we must divide this quantity by the fraction representing all positives. In this way the probability that any individual with a positive test is affected with D is found to be:

$$1.\ p = \frac{\alpha\eta}{(1-\beta) + (\alpha+\beta-1)\eta}$$

Similarly, the probability that any individual with a negative test is affected with D is:

$$2.\ p' = \frac{(1-\alpha)\eta}{\beta-(\alpha+\beta-1)\eta}$$

Equations 1 and 2 show how the probabilities p and p' vary with the incidence η when "sensitivity" and "specificity" of a method are given.

When η varies between 0 and 1, p and p' also vary within this interval. In the particular case of $\alpha+\beta=1$, $p=p'=\eta$.

Solving equations 1. and 2. for η leads to:

$$3.\ \eta = \frac{(1-\beta)p}{\alpha-p(\alpha+\beta-1)} = \frac{\beta p'}{(1-\alpha) + p'(\alpha+\beta-1)}$$

The preceding is an application of Bayes' theorem. It may be instructive to consider it in a more general form.

Assume a set (Ci) of mutually exclusive potential causes, each one capable of producing a certain event E. Then Bayes' theorem of inverse probability states:

$$4.\ p(Ci|E) = \frac{p(E|Ci)\ p(Ci)}{Si[p(E|Ci)p(Ci)]}$$

p(Ci|E) is the probability of the presence of the cause Ci **after** the event E.

p(Ci) is the probability of the presence of Ci **before** the event E.

p(E|Ci) is the probability of the occurrence of the event E when the cause Ci is present.

In our case, the event E is a positive test result. The set Ci represents all the conditions capable of causing a positive test result. When the positive result is due to a singular pre-selected cause (the condition for which the test was intended), then equation 4 gives the probability of a "true" positive. The other causes need not be specified, because they can be consolidated into one. The required numerical values may be obtained as marginal sums based on the table in this appendix. This is the notational correspondence:

$p(Ci) = \eta$
$p(E|Ci) = \alpha$
$Si[p(E|Ci)p(Ci)] = (1-\beta) + (\alpha+\beta-1)\eta$

Bayes' theorem is exact and follows from nowadays universally accepted principles of compound probability. Its applicability is restricted because the a priori probabilities of causes are usually unknown. To overcome this difficulty, Bayes introduced ad hoc the axiom that in the absence of such a priori data, all causes are equally probable. Because of this difficulty, Bayes refused publication during his life time. For our case, the mentioned additional axiom could mean only that the a priori probabilities of the presence

or absence of the attribute A (See Table 2) are equal, that is ½. This would imply $\eta = 0.5$, a population rate of 50,000 per 100,000. In this neighborhood the probability of a false positive is about 1% only.

It has been claimed by Cherry[3] that knowledge of the a priori probabilities of the causes is of little practical importance, because results are not much influenced by wrong weightings of the a priori probabilities of the causes. This is true in many areas of investigation, and thus we have become accustomed to accept unconsciously Bayes' additional axiom, *faute de mieux*. But when these a priori probabilities become extreme, either approaching 0 or 1, application of the axiom leads to prohibitively misleading results, as in our case.

Acknowledgement

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Lipoma of the Corpus Callosum: A Nonsurgical Entity

Nosology, Diagnosis, Management

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WINSTON-SALEM

Lipoma of the corpus callosum is an intriguing entity which raises questions regarding its etiology, pathogenesis, associated clinical phenomena, and management. Since a physician rarely sees this lesion more than once in his active career, we have attempted to assimilate the experience of others in this article, which also gives a consensus regarding the functions of one of the largest of intracerebral structures.

About half of the 72 patients reported with lipoma of the corpus callosum have presented with epilepsy, mental changes and/or evidence of dysraphism (midline defects due to imperfect closure of the neural tube). The clinical manifestations, especially the seizures, have been ascribed to the supracallosal lipoma when in actual fact they are probably not directly related, but are both results of embryonic malformation.

Rokitansky in 1856 was the first to describe a lipoma of the corpus callosum at autopsy[2]. Its rarity is shown by the fact that the first recorded post mortem diagnosis of the lesion at the Johns Hopkins Hospital occurred after 23,813 consecutive autopsies[3]. Recently we studied a patient with a lipoma of the corpus callosum whose atypical clinical and radiologic features merit recording.

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Case Report

A 43-year-old white woman was admitted with complaints of low backache of seven years' duration, headaches for the past five years, and blackout spells. She had bifrontal and suboccipital headaches which were aggravated by coughing, stooping, and lying down. She had had a total of four "blackout" spells at the ages of 4, 22 and 42 years respectively, the last one being two months prior to admission. All the attacks had occurred while she was standing, and were unaccompanied by involuntary movements, tongue-biting, or urinary incontinence. The patient was known to be hypertensive (irregularly treated) for the past five years. There was no history of drug intake on a long-term basis.

Physical examination

The patient was 5 feet 8 inches tall, weighed 271 pounds, and was right-handed. She was slightly hirsute. A large lobulated subcutaneous mass (?lipoma) was located over the left lumbar region. Her secondary characteristics, external genitalia, and pelvic structures were normal. The cardiovascular and respiratory findings were within normal limits. She was mentally normal and alert, and gave no evidence of aphasia, or apraxia.

Funduscopic examination revealed bilateral papilledema of 4 to 5 diopters without hemorrhages or exudates. No spontaneous venous pulsations were seen. There was a suggestion of glial tissue over both disks. The impression was of a chronic bilateral papilledema with early optic atrophy. The visual acuity was 20/50 in the right

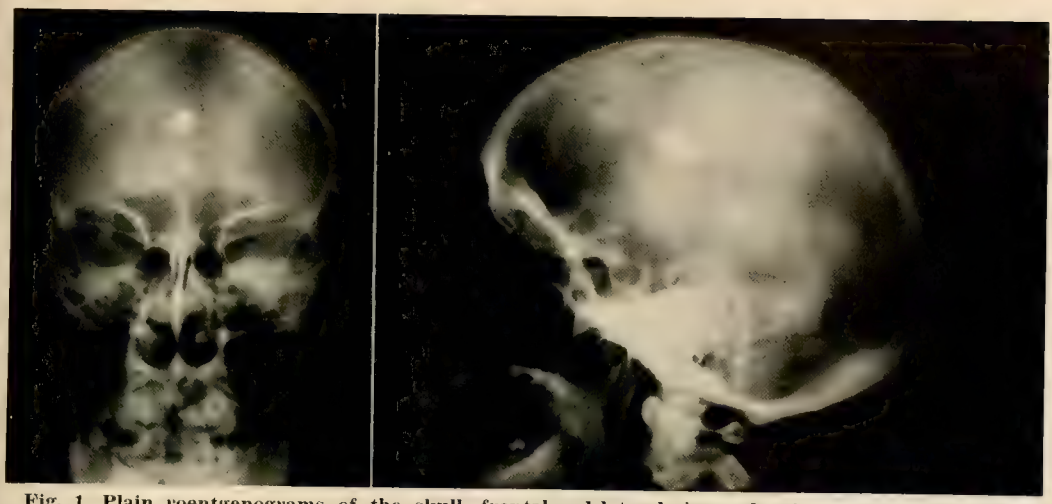


Fig. 1. Plain roentgenograms of the skull, frontal and lateral views, showing a midline oval, dense calcified shadow.

eye and 20/40 in the left. Perimetric examination showed bilateral constriction of the visual fields. Tangent screen examination demonstrated an enlarged blind spot on both sides. The tendon reflexes were bilaterally brisk and symmetrical. The left plantar response was flexor, while the one on the right was equivocal. The motor and sensory examinations were normal. The patient could not walk tandem without lurching.

The physical findings suggested either a midline intracranial tumor or benign intracranial hypertension.

Accessory clinical findings

Audiograms and results of caloric tests were normal. The hemogram and plasma protein, blood urea nitrogen, serum electrolyte, and blood sugar values were all normal. The 17-ketosteroids and plasma cortisol estimations were within normal limits. An electrocardiogram and pulmonary function studies were also within normal limits. Radioactive brain scan was normal. An echoencephalogram showed the midline structures in the normal position. The electroencephalogram, though replete with artefacts, showed diffuse mixed theta and delta activity, with prominence of delta waves over the right hemisphere centrally and occipitally.

Roentgenograms of the skull revealed a round calcified intracranial density about the area of the lower margin of the falx cerebri, measuring 2 cm in its anteroposterior diameter and 1 cm in its transverse diameter. There was some suggestion of a surrounding radiolucent area which, however, was noted only on retrospective examination. The sella turcica was normal in size and configuration on planograms (Fig. 1).

Ventriculography done with the patient sitting showed a tight dura, but when it was opened the brain pulsations were found to be normal. The ventricular fluid pressure was 70 mm of cerebrospinal fluid. Forty cubic centimeters of air was introduced into the left lateral ventricle.

A ventriculogram showed air in the left lateral ventricle communicating freely with the right lateral and third ventricles. The lateral ventricles were normal in size, and there was no indication of lateral displacement. In the AP view there was separation of the superior aspects of the bodies of the lateral ventricles and, on one of the films, a suggestion of a soft tissue mass impressing itself upon the medial aspect of the body of each lateral ventricle. The third ventricle was normal. The findings suggested a mass lesion in the region of the corpus callosum, with impression upon and some displacement of the medial aspect of the body of the lateral ventricles (Fig. 2).

A right carotid arteriogram obtained after the ventriculogram showed the right middle cerebral artery and both the anterior cerebral arteries in the normal configuration, without any displacement. No abnormal vessels were seen. Venous anatomy was normal. The vessels in the pericallosal cistern on the right side were fairly well visualized and suggested some downward displacement, especially medially (Fig. 3).

Craniotomy

The patient underwent a right parietal craniotomy, with subtotal removal of the lipoma of the corpus callosum, followed by right subtemporal decompression. The tumor was seen as a yellowish, calcified mass attached to the inferior margin of the falx cerebri, commencing about 1 to 2 cm behind the rostrum of the corpus callosum and extending posteriorly toward the



Fig. 2. Ventriculograms, AP and lateral views, showing the relationship of the calcified lesion to the lateral ventricles.

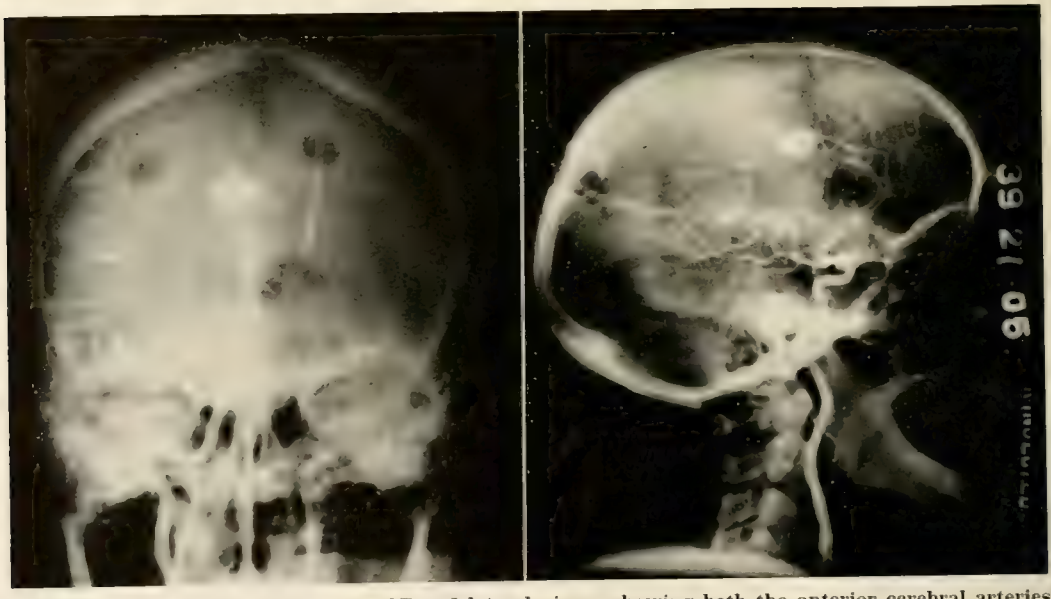


Fig. 3. Right carotid arteriograms, AP and lateral views, showing both the anterior cerebral arteries in the midline, coursing through the calcified lesion.

splenium, where many small vessels as well as branches of the anterior cerebral artery were seen coursing through the tumor. Perhaps 50% of the tumor was resected.

The patient failed to recover consciousness and died in coma on the tenth postpoperative day. An autopsy was not obtained.

Review of the Literature

Lipomas of the corpus callosum have been reported from time to time, mostly as isolated cases. List and associates[1] reviewed 30 cases, Nordin and others[4] 15, Zettner and Netsky[5] 14, and Cooper and colleagues[6] another 6, for a total of 65 cases. Since 1962 we have been able to trace 7 others[7-13], which with the present report add up to 73 cases, of which 54 were verified either at operation or autopsy. Forty-two of 73 patients (50%) had some symptoms referable to central nervous system dysfunction.

Three patients underwent biopsy without com-

Table 1
Signs and Symptoms
(42 Patients)

	No. Patients
Seizures	36
Mental changes	11
Mental retardation	10
Headaches	7
Hemiparesis	6
Vomiting	2

plications[15, 20, 21]. Two underwent exploratory craniotomy[10, 12] and 17[1, 3, 4, 8, 16, 17, 21-28] (including the patient reported here) underwent craniotomy with subtotal excision of the tumor; 10 of the 17 died within a few hours to 10 days following operation. One died five months after operation. Of the 6 surviving patients, 3 were left with residual neurologic deficits[8, 22, 28]; only 3 were improved or asymptomatic, 2 of them receiving anticonvulsants[3, 24], while the details of the third are not described. The only patient undergoing total removal of the lipoma with subsequent improvement is that described by Groff and others[21a].

These cases are summarized in Tables 1-6.

Functions of the Corpus Callosum

The pre- and post-central motor and sensory cortex receive numerous fibers from the cortex of the opposite hemisphere through the corpus callosum. This commissure, the largest in *Homo sapiens,* is seen only in placental mammals and not in the monotremes or marsupials[29]. In the latter, motor and sensory cortical areas are interconnected through the unusually large anterior commissure.

The exact function of this huge interhemispheric connection is not definitely known. In 1741 Peyronie, professor of surgery at Montpellier, considered it to be the seat of the soul[30]. In 1749 Zinn[31], at Gottingen, after sectioning the corpus callosum in six dogs, concluded that this commissure "may be damaged and cut, yet the senses and power of movement remain intact." At the beginning of this century Liepmann (1907) published a series of papers stressing the value of apraxia as a diagnostic sign of callosal damage[32]. In 1939 Moruzzi[33] showed in the rabbit that sublimal stimulation of the cortical area, from which masticatory movements could be obtained, reduced the threshold of the homologous area of the opposite hemisphere to electrical stimulation. All synchronous volleys reaching a given sensory cortical area in one hemisphere produce a response in the homologous area of the opposite hemisphere, and the impulses responsible for this response have been shown to cross through the callosal fibers[29].

Despite this physiologic evidence after stimulation of the corpus callosum, studies do not show any recognizable deficits after extirpation.

Table 2
Types of Seizures
36 Patients

	No. Patients
Epilepsy (unspecified)	11
Convulsions	9
Generalized seizures	4
Jacksonian (motor) seizures	2
Attacks of feeling of falling over, sleepwalking, and attacks of leg weakness	1
Clonic seizures of arms	1
Attacks of facial redness and loss of consciousness	1
Attacks of head turning to left	1
Nocturnal epilepsy	1
Nocturnal attacks of crying, screaming at age of 20 years	1
"Dizzy" spells	1
Childhood spells of vertigo and undefined aura	1
Fainting spells (?epilepsy)	1
Enuresis until 12 years of age	1

Table 3
Abnormal Neurological Signs
5 Patients

	No. Patients
Right spastic hemiplegia[14]	1
Absent triceps and ankle reflexes, wide-based gait; with veering to left[15]	1
Emotional lability; bilateral Babinski signs[6]	1
Bilateral papilledema; bilateral minimal horizontal nystagmus[4]	1
Bilateral chronic papilledema with early atrophy; bilaterally symmetrical brisk tendon reflexes; equivocal right plantar response (present case)	1

Table 4
General Physical Findings

	No. Patients
Obesity[16]	1
Obesity with appearance of thyroid and general endocrine hypofunction; subcutaneous lipoma over scalp communicating with intracranial lipoma since birth[4]	1
Lumbo-sacral meningocele with paralysis of lower limbs and hydrocephalus[1]	1
Subcutaneous frontal lipoma at birth; defect in frontal bone[17]	1
Subcutaneous lipoma over anterior fontanel at birth[18]	1
Subcutaneous lipoma. Bilateral membranes between toes[19]	1
Spina bifida[20]	1
Small lump in front of head, removed at age of 6 years[21a]	1
Papillematous lesions over face and occiput[3]	1
Obesity, mild hirsutism, huge subcutaneous, lobular tumor over lumbar region (?lipoma): present case	1

Table 5
Associated Intracranial Abnormalities

	No. Patients
Agenesis or atrophy of corpus callosum	10
Total absence of corpus callosum	2
Unilateral cerebral hemispheric atrophy	11
Separate lipomas in choroid plexus	4
Multiple lipomas	1
Pituitary tumor	1
Acoustic neurofibroma	1
Partial agenesis of inferior vermis of cerebellum	1

Table 6
Extracranial Abnormalities

	No. Patients
Subcutaneous lipoma	6
Lumbo-sacral meningomyelocele and hydrocephalus	1
Spina bifida	1
Eisenmenger's complex	1
Numerous minor malformations of intestinal, renal and circulatory systems	1
Congenital defect of occipital bone (cranium bifidum)	1

In the cat, the dog, and the monkey, no changes in the spontaneous behavior of the animal nor deficits in sensory or motor functions seem to result from sectioning of the corpus callosum in the absence of concomitant cortical damage[34, 35].

In man agenesis of the corpus callosum is not characterized by any demonstrable deficits in execution of movements or sensory perception[34]. In primates, other interhemispheric commisures are not concerned in corticocortical interrelationships, with the exception of certain portions of the anterior commissure.

Surgical sectioning of the corpus callosum in human beings is rarely followed by any deficit, provided there are no hemispheric lesions[36, 37]. Since, however, a temporary motor dyspraxia can occur if motor or sensory deficits are present preoperatively, it has been hypothesized that the corpus callosum can mediate a facilitating functioning in fine movements[38]. The transient nature of these disturbances would seem to corroborate this hypothesis, since compensation may occur on the basis of ipsilateral mechanisms. Indeed, it is clear that motor apraxia cannot be attributed to callosal lesions alone[34].

Between 1900 and 1950 the corpus callosum had acquired a notable reputation for being, among all brain structures, the "largest, most useless,"[39] The same author added that Warren McCulloch remarked jocularly in 1940 that "the only demonstrated function of the corpus callosum seems to be that of aiding in the transmission of epileptic seizures from one to the other side of the body." In 1941 Lashley still found ample justification for his own facetious surmise that probably the principal function was not so much excitatory in nature as mechanical—that is, to keep the two hemispheres from sagging[40].

In 1958 Denny-Brown[41] stated: "Whatever the corpus callosum may contribute, it is not in the coordinated action of both limbs in the synthesis of a motor act, but in some relation to priority of sensori-motor initiation of behavior by one or other hemisphere." He added: "each cerebral hemisphere, independently of the other, appears to be able to initiate bilateral behavior without direct participation of the other, though the detailed performance of the ipsilateral limb requires the integrity of its corresponding hemisphere." He also suggested looking for "bimanual synergia" where mirror behavior of the two opposite limbs cannot be suppressed in patients with agenesis or lesions of the corpus callosum.

Recently the corpus callosum has been said to play a vital role in touch-training transfer functions[12, 42], though as yet this has no direct clinical significance. Geschwind and others[43], in 1962, described a central deconnection syndrome. Clinically, demyelination of the corpus callosum is seen in the Marchiafava-Bignami syndrome, but accompanied by lesions in the adjacent cortical mantle. "In corpus callosum syndromes all symptoms except the negative sequels to destruction of fiber systems should be excluded, since the corpus callosum is composed of nerve fibers only save for its indusium which is a scanty cellular sheet on its surface, representing a vestigial, 'olfactory gyrus'." (Kinnier Wilson, 1942)[44]

At present the tentative conclusion is that, in spite of physiologic and psychologic evidence to the contrary, a pure, localized lesion of the corpus callosum does not produce any deficit that can be detected by clinical methods, thus confirming the viewpoint of Gowers[45], expressed in 1893, that "we do not know of any symptoms that are the result of damage of the callosal fibers."

Pathogenesis and Classification of Lipomas

Intracranial lipomas occur on the dorsal surface of the corpus callosum, in the basal cisterns, in the quadrigeminal plate, and alongside the foramen magnum. As noted by Krainer[46], they have a predilection for the cisterns and choroid plexuses. Lipoma of the corpus callosum arising from the callosal cistern may be as small as a bean or as large as a banana, molding itself to shape of the underlying structure. Its size apparently is correlated neither to the age of the patient nor to the clinical picture. In early embryonic life the cisterns are filled with masses of primitive meninx and are formed by absorption of this tissue. The meninx could give rise to fibro-fatty masses because of abnormal persis-

tence and perverted de-differentiation of this primitive tissue. Intracranial lipomas may be associated with intraspinal lipoma[47].

The pathogenesis of lipoma of the corpus callosum is not known, but a number of theories have been advanced[16]. The lesion may derive from:

1. Proliferation of fat cells normally present in the leptomeninx.
2. Deposition of fat in cellular masses arising from proliferation of common connective tissue cells.
3. Deposition in connective tissue or glia of fatty products of nerve tissue.
4. Fatty degeneration of proliferated glia.
5. Abnormal inclusion of fat-forming material within the closing lips of the neural groove.
6. Perverted differentiation of pre-existing embryonic meninx.

According to Zettner and others[5], the exact classification of callosal lipoma is uncertain, but it may be designated as a hamartoma (a word coined by Albrecht[48] in 1904 from *hamartein*, meaning to err), if fat cells are normal constituents of the meninges. If fat is a tissue not indigenous to the area and derived from a heterotopic inclusion, the tumor is a *choristoma* (a tumor developing from misplaced embryonic elements). Among others, both Zettner and others[5] and Wolfson and others[3] regard the lesion as an embryonic malformation. The latter authors give the following evidence:

1. The anterior cerebral arteries tend to be incorporated within the lipoma. If the lipoma were a true tumor or cell-rest, it would tend to displace the tissues.

2. Lipomas have frequently been observed in the newborn and are often associated with other congenital anomalies.

3. Lipomas of the central nervous system tend to be uniformly localized to the cisterns.

4. Lipomas of the central nervous system manifest very little, if any, growth.

Etiology

The origin of the tumor is speculative. Intrauterine inflammation, disturbance of vascular supply, and maternal infection in early pregnancy have been implicated[5]. On the frequent occurrence of a callosal lipoma and agenesis of the corpus callosum, the remarks of Zettner and Netsky (1960)[5] are pertinent. They believe that the two lesions must be considered as independent manifestations of two pathologic processes; namely, meningeal maldifferentiation and dysraphic disturbance. A rare recessive gene or dominant mutation is postulated as the cause of the maldifferentiation. Rarely, familial incidence is noted in cases of agenesis of corpus callosum[49], but as yet no familial callosal lipoma has been recorded.

Clinical Features

As seen in the cases reviewed, 42 of 73 patients (50%) had some symptoms referable to nervous-system dysfunction, leaving 50% who were totally asymptomatic. Thirty-six of the 42 patients had seizures, 11 had mental changes, and 10 had varying degree of mental retardation*. As seen in Table 2, the seizures were of various types, with no specific pattern. The details of mental changes are scantily reported. Only one other patient (Nordin and others, 1955)[4] besides the one reported here, had signs of intracranial hypertension with papilledema. In Nordin's case, autopsy disclosed no evidence of either internal hydrocephalus or cerebral edema. In the present case, normal-sized ventricles were demonstrated on ventriculographic study. It is our belief that both these patients had "benign intracranial hypertension," an ill-understood entity described predominantly in obese middle-aged women, and that the lipoma was probably not the primary factor.

Whether the lipoma of the corpus callosum *per se* is the cause of seizures is questionable. Zettner and Netsky (1960)[5], in discussing the pathogenesis of seizures in these cases, exclude pressure by the tumor as the causative factor, since atrophy of the fibers is not described. They believe that infiltration of neural tissue by the dense fibrous tissue as seen on microscopic examination may produce a progressive fibrosis comparable to a scar. Thus they believe that the mechanism for the resultant epilepsy may be similar to the scarring found in post-traumatic epilepsy. Since nonspecific epilepsy is present in less than 50% of the cases, and the corpus callosum is devoid of neurons, we tend to believe that there is no direct causal relationship between the lipoma and the seizures. The relationship may possibly be due to some associated metabolic dysfunction in the neurons.

The same nebulous relationship exists in cases of seizures accompanying agenesis of the corpus callosum. In both conditions, various types of mental changes (apathy, indifference, lack of concentration, emotional lability, personality change) or mental retardation, or both are not uncommon.

Though some authors[50] believe in the existence of a midline cerebral syndrome producing specific mental changes, and others[51] in a syndrome of the tumor of the corpus callosum, we believe that such a tumor, alone, does not produce *any* discernible clinical signs or symptoms unless associated with a concomitant lesion of the cerebral hemisphere. The association of signs of intracranial hypertension (only 2 reported cases) is factitious, since it is commonly believed that these lesions are embryonic malformations which show hardly any growth[3]. Rarely, evidence of

*Only 5 patients manifested neurologic signs.

intracranial hypertension may be found in degenerative diseases of the nervous system on an unexplained basis, as mentioned by Kelly (1951)[52], who reported a patient with a tuberous sclerosis who had bilateral papilledema, headaches, and normal air-study findings.

Radiologic Features

Plain roentgenograms of the skull

As first indicated by Sosman[53], lipoma of the corpus callosum presents a triad of diagnostic characteristics.

1. A shadow in the midline located just above the corpus callosum, usually in the anterior region.
2. A central area of radiolucency, since the tumor is composed of fat.
3. In frontal views, outlining the radiolucent lipoma, either a dense oval ring of calcium or an incomplete deposition of calcium in the form of two sickles, or two facing C's. In the lateral view the radiolucent area may appear by itself, or it may be surrounded by mottled calcification, tapering posteriorly and somewhat conforming to the shape of the rostrum and anterior part of the callosal body.

The present case report is believed to be the first in which the lesion was seen as a totally calcified oval with a suggested surrounding radiolucent area. Since the radiolucent area was not noticed until later, the true nature of the lesion was not recognized until the time of operation.

Air studies

Wolfson and co-workers (1957)[3] have listed the following characteristic air-study findings:

1. Symmetrical separation of anterior portions of the frontal horns and bodies of lateral ventricles by the centrally located lipoma.
2. Compression of the anterior horns of the lateral ventricles by the lipoma, generally with poor or no visualization of these structures in the lateral view.
3. Dilatation of the bodies of the lateral ventricles.
4. Dilatation of the centrally located third ventricle, often with elevation of this structure, suggesting some degree of agenesis or atrophy of the corpus callosum. Its roof may be normal in location or depressed by a large lipoma, even in the presence of agenesis.
5. Concave mesial deformity of the bodies of the lateral ventricles.
6. Possible dilatation of the foramina of Munro, as suggested by laminograms.
7. At times, findings similar to those of agenesis of the corpus callosum.

Carotid angiography

Talairach and others (1951)[54] were the first to describe the angiographic findings in lipoma of the corpus callosum. We agree with the statement of Wolfson and others[3] that if special x-ray procedures are justified in lipoma of the corpus callosum, then cerebral arteriograms should be secured in preference to the air study, since the former yield specific information about the lesions owing to their peculiar vascular pattern. The angiographic features described by these authors are:

1. Incorporation of the vessels within the structure of the lipoma rather than displacement by it.
2. Increased vascularity and caliber of the arteries of the lipoma. The pericallosal artery need not be entirely incorporated by the lipoma; often branches of these vessels lie about its surface.
3. At times some depression, distortion, and stretching of the pericallosal arteries.

The differential roentgenologic diagnosis includes tumors of the corpus callosum, cysts of the septum pellucidum, cysts of the cavum vergae, tumors of the septum pellucidum, and parasagittal tumors. None of these lesions present the triad of plain x-ray findings. And in cases (such as the present one) where they are lacking, the fact which clinches the diagnosis is that none except a lipoma of the corpus callosum would be expected to permit the anterior cerebral artery to pursue its normal parasagittal course[3].

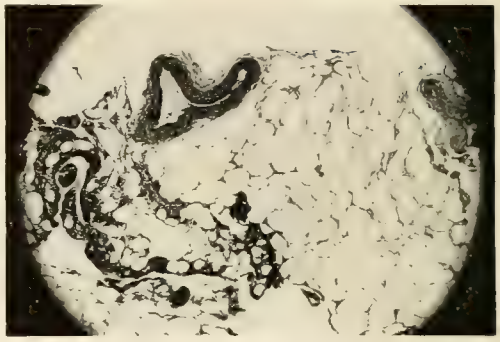


Fig. 4. Microscopic appearance of the lipoma of the corpus callosum, showing mature fat cells and prominent blood vessels. (X100)

Pathology

The microscopic examination of lipoma of the corpus callosum shows mature fat cells like adipose tissue elsewhere in the body, with varying amounts of fibrous tissue and a large number of enlarged blood vessels (Fig. 4). The lesion usually has a well delineated fibrous capsule. Calcium is found deposited in either the tumor itself, the capsule wall, or the surrounding brain parenchyma. Wollschlager and others (1961)[55], however, using postmortem radiographic techniques, have shown that the characteristic bi-

lateral sickle-shaped calcification occurs in the brain substance proper[13]. In some cases even bone is deposited[55].

Some of the cases are associated with continunity of the tumor in the third ventricle through the foramina of Munro, which are subsequently dilated. Elongated foramina of Munro are seen in cases associated with agenesis of the corpus callosum, due to wide separation of the lateral ventricles. Often the underlying callosal body shows partial, or rarely total, agenesis. Not uncommonly separate lipomas may rise from the choroid plexuses of lateral ventricles. Sometimes the underlying corpus callosum may be deformed by the overlying lipoma. The ventricular system does not show any dilatation or significant lateral displacement, but the third ventricle may be displaced upwards in cases associated with agenesis of the corpus callosum.

Associated anomalies in the cerebral cortex are frequent, especially in cases of agenesis. These anomalies include failure of the normal gyral pattern, microgyria, abnormalities in the granular layers of the cortex, and absence of the fornices. These abnormalities are rarely looked for, however, and more detailed studies, especially histochemical, are needed to explain the presence of mental changes and epilepsy. No case of malignancy has been reported in any of the cases described so far.

Surgery

Of the 17 patients who underwent resection, only 6 survived. The immediate cause of death is thought to be the fact that the tumor is traversed by the anterior cerebral arteries and its branches, which are dilated and engorged, as seen in some angiograms[3, 14], and clipping of these vessels proximally leads to disastrous and often fatal consequences. It is conceivable that this procedure leads to bilateral cingulate gyrus infarction, producing a terminal state of akinetic mutism. Groff and others (1951) reported the only case of "total" resection of the tumor which was followed by improvement. It was his feeling that "lipoma of the corpus callosum can be attacked surgically with good results if care is taken to avoid entering the third ventricle (especially common in cases associated with agenesis of the corpus callosum) and as conservative removal as possible carried out."

We believe that even though a partial excision of the lesion without residual deficits may be possible in expert hands (only 3 cases), the surgical feat is not indicated, partly because of the risk involved, but chiefly because the lesion is not the primary cause of the patient's disability. When exploration is done inadvertently, as when the classic x-ray findings are lacking, biopsy should be the only goal of the surgeon. We believe that the associated clinical features are nonspecific and that they are not directly caused by the callosal lipoma. Surgical removal of the lesions would be akin to removal of the paraventricular tubers found in cases of tuberous schlerosis.

Conclusions and Summary

Lipoma of the corpus callosum is an embryonic malformation showing hardly any growth, which may manifest itself in either sex at any period of life from infancy to old age. In about 50% of the cases it is asymptomatic; in other 50% it may be associated with seizures of various types, mental retardation, or nonspecific mental changes.

The diagnosis rests on plain x-ray films of the skull showing the pathognomonic triad of signs. In a few cases there are lipomas elsewhere in the midline of the body which might give a diagnostic clue. In cases lacking the typical skull x-ray findings, a carotid arteriogram will show the anterior cerebral vessels running through the lesion instead of being displaced by it.

Management is effected by means of the usual anticonvulsant medications. Inadvertent exploration warrants only a confirmatory biopsy, and the majority of authors believe that any temptation to excise the lesion should be strongly resisted.

The syndrome of lipoma of the corpus callosum with its associated developmental defects is tentatively classified as a "disseminated hamartiosis," akin to Moolten's concept of the tuberous sclerosis complex[56].

1. An atypical case of lipoma of the corpus callosum is presented and 72 others reviewed.

2. The lipoma is probably an embryonic malformation which is itself asymptomatic.

3. The functions of the corpus callosum are reviewed.

4. The radiologic features which allow diagnosis by skull roentgenography and angiography are discussed.

5. When detected by x-ray studies or in exceptional circumstances by biopsy, lipoma of the corpus callosum warrants conservative management by the use of anticonvulsant agents, without any attempt at surgical removal, because the tumor is by itself asymptomatic and surgical mortality is in the vicinity of 64 per cent.

References on request

Aerosol Enzymatic Debridement for Pulmonary Alveolar Proteinosis

John H. Felts, M.D.

Winston-Salem

Since Rosen, Castleman, and Liebow[1] first established pulmonary alveolar proteinosis as a distinct process, nearly 100 cases have been reported. As its name implies, the condition is characterized by the deposition in the alveolar spaces of lipoproteinaceous material. This material is thought to derive from proliferating alveolar septal cells and is PAS-positive. It has been suggested that hypersecretion or decreased destruction of lipoprotein surfactant, the antiatelectatic compound supporting the alveolar wall, is responsible for its accumulation[2, 3].

The pathogenesis and course of the disease is still not clear enough to allow accurate assessment of proposed treatments or sensible prognostication. Because the mortality is currently about 28%[2], observations about a case recently treated by aerosol enzymatic debridement are recounted.

Case Study

A 45 year old white male equipment maintenance foreman, was admitted to the North Carolina Baptist Hospital January 12, 1964 because of bilateral pulmonary infiltration found by chest x-ray in December 1962. His only complaints were cough and moderate dyspnea. He had been hospitalized for 14 months in 1945 with pulmonary tuberculosis and again in 1948 when a phrenic nerve crush was done. Annual examinations thereafter revealed no recurrences, and two sputum cultures for acid-fast bacilli in September 1963 were sterile. The patient had smoked two packs of cigarettes daily for eight years and had consumed alcohol in excessive quantity occasionally in the past. Except for a few crepitant rales heard at the posterior lung bases, physical examination was not striking.

The chest roentgenogram (Fig. 1) demonstrated diffuse and nodular infiltrates in both lower lung fields but sparing the hilum.

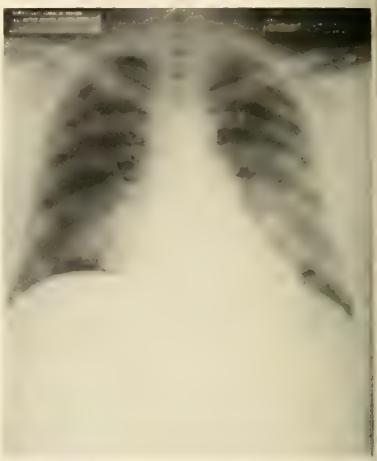


Fig. 1. Chest roentgenogram taken before treatment was begun. Bilateral infiltrates without hilar or mediastinal adenopathy are characteristic of the disease.

The hemoglobin was 16.9 gm per 100 ml; the hematocrit 50 vol.%, and the sedimentation rate (Wintrobe) 18 mm per hour corrected. Serum albumin was 3.9 gm/100 ml and globulin 5.0 gm/100 ml. Serum lactic dehydrogenase was 620 units. Limited pulmonary function studies disclosed no ventilatory obstruction and a slight decrease in vital capacity. Cultures of two gastric washings for acid-fast bacilli were sterile. A scalene biopsy was not helpful and a Kveim test was not characteristic of sarcoidosis. A Tine test was positive, but fungal skin tests were

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From the Department of Medicine, The Bowman Gray School of Medicine of Wake Forest College and The North Carolina Baptist Hospital, Winston-Salem, North Carolina.

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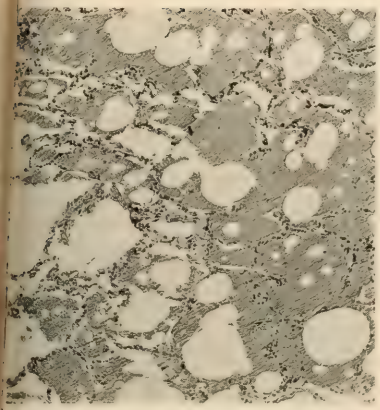


Fig. 2. Photomicrograph of lung biopsy specimen. The material deposited within the alveoli is PAS positive and appears homogeneous. (X100, hematoxylin and eosin)

negative. An open lung biopsy was performed March 4, 1964; the diagnosis of pulmonary alveolar proteinosis was made when PAS-positive material was found in the alveolar spaces (Fig. 2). Culture of the tissue revealed Mycobacterium (Group II)—Skotochromogen. Fungal cultures were sterile.

An endobronchial catheter was placed May 26, 1964, and 3 ml of 10% acetylcysteine instilled at six-hour intervals until 42 ml had been given. During the first day of treatment 350 ml of PAS-positive sputum were obtained, but it was necessary to remove the catheter because the patient was discomfited by mediastinal and subcutaneous emphysema. Streptokinase, 25,000 units, and streptodornase, 6,250 units, (Varidase) in 2.5 ml of normal saline were then given as an areosol, using a positive pressure respirator. An increase in volume and chunkiness of sputum was observed. Because daily inhalation provoked myalgia and fever, treatment was reduced to twice weekly; prior administration of 0.6 gm acetylsalicylic acid and 25 mg of diphenhydramine (Benadryl) seemed to suppress side effects without interfering with the therapeutic effects of the enzymes. Outpatient treatment was continued until October, 1964, when a chest x-ray showed almost complete clearing of the bilateral infiltrates.

When seen again March 20, 1965, the patient reported an increase in stamina and a marked decrease in dyspnea. Cough was no longer prominent. Sedimentation rate was 18 mm per hour, serum lactic dehydrogenase 230 units, serum albumin 4 gm/100 ml and serum globulin 4.4 gm/100 ml. The serum electrophoretic pattern was normal. A chest x-ray demonstrated no cardiac or pulmonary abnormalities (Fig. 3).

Comment

Sufficient justification for administration by inhalation or endobronchial instillation of agents capable of decreasing the viscosity of accumulated lipoprotein, facilitating expectoration, is offered by the mortality rate of 28%[3] and the prospect of progressive restrictive pulmonary changes and impairment of gaseous diffusion[1-3]. Awareness of improvement, freely expressed by the patient 10 months after the start of therapy, falls in serum lactic dehydrogenase and globulin concentration associated with a rise in serum albumin, and definite roentgeno-



Fig. 3. Chest roentgongram taken five months after treatment was stopped. The lungs appear normal.

graphic clearing are sufficient evidence that treatment was helpful. Cure cannot be claimed because we do not know whether the process can recur after aerosol debridement. No lung biopsies after clearing of infiltrates have been reported to my knowledge.

Acetylcysteine was first employed in the hope that alveolar debris could be liquefied and easily expectorated. The increase in sputum from virtually none to 350 ml during the first day of irrigation and the identification of PAS-positive material therein suggest that this occurred. However, the phlegm obtained was less gelatinous than anticipated, prompting the change to aerosol enzymatic debridement in an effort to shorten the period of treatment. Sputum increased strikingly in volume and was "chunky," indicative of effective lysis[4]; complete radiographic clearing was demonstrated after five months of treatment. In addition to streptokinase-streptodornase[5], trypsin and chymotrypsin are effective proteolytic agents and have been successfully used in the management of pulmonary alveolar proteinosis[6]. Acetylcysteine[1] and heparin[3, 4] have also been employed, the latter because of its ability to alter the physico-chemical state of lipoproteins. Side effects are apparently related to the quantity of drug given and to the frequency of administration.

Although a satisfactory explanation for the initiation and development of this process has not yet been offered, it seems unlikely that geography, occupation, race, genetic endowment, or infection can be incriminated[2]. Only three earlier cases have been associated with pulmonary tuberculosis[2] and a single previous isolation of atypical acid-fast bacilli has been reported[8]. When bacteria or fungi have been isolated, they have probably been opportunistic invaders taking advantage of changes in alveolar environment[9]. The absence of histologic evidence of granulomatous inflammation in this case is further evidence that the acid-fast bacilli isolated were not pathogenic. Cigarette smoking has not been sufficiently frequent to permit speculation, nor does age appear relevant. Several patients have consumed alcohol in greater than usually acceptable quantities as a social solvent, provoking the suggestion that alcohol-induced depression of lipoprotein lipase activity prevents normal destruction of surfactant[3]. No biochemical data are yet available to support this notion, which must also account for the failure to observe and define pulmonary alveolar proteinosis earlier despite the prevalence of alcoholism in the Western world.

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Patients would be safer if we could return to our old symbiotic, give-and-take relation with the FDA, and recent activity on the part of its new medical director, Joseph F Sadusk, Jr., M.D., seems to indicate strongly that there is indeed hope that this may be accomplished.—Editorial in *Pennsylvania Medical Journal*, 68:2, (Feb.) 1965.

The Physician's Role in Psychiatric Emergencies

JOHN A. EWING, M.D.

CHAPEL HILL

Psychiatric emergencies often confront people other than psychiatrists; for example, the police, the social worker, and the general practitioner. As in most medical matters, prevention is always preferable to cure. From this point of view, future progress can come from developing better methods of detecting pending emergencies early.

Physicians, however, can expect to be called in to assist with such emergencies from time to time. These conditions will usually fall into one of the following categories:

1. *Anxiety — acute and overwhelming.* This category includes states of panic, certain types of hysterical behavior, and homosexual panic.

2. *Confusion.* Under this heading fall certain cases of schizophrenia, brain syndromes, amnesia, fugue states, and some cases of depression.

3. *Psychotic states* include schizophrenia, certain profound depressions, postpartum psychoses, and delirious states due to poison or alcohol.

4. *Conditions involving violence.* These include suicidal and homicidal threats or attempts, some cases of mania, general aggressive behavior, and catatonic excitement.

Virtually all psychiatric emergencies are over in a short time, some within a few minutes or a few hours. If well handled and properly controlled, almost all of them will be ended within 48 hours. Then is the time to seek preventive care to reduce the likelihood of recurrences and also the time when the psychiatrist is most likely to be of use. During the emergency itself any competent physician can be of great help if he keeps some general principles in mind.

General Principles

Establish human contact: In the first place, any human being can be of assistance if he remains calm, offers support, and accepts the communications of the disturbed person. Unless the patient refuses, it is better for someone to stay with him; but clearly this other person should not be excitable or overtalkative.

See the patient. When you, as a physician, are called upon to intervene in some such emergency, where should you see the patient? Much depends on the individual circumstances, but the patient should be visited where he is if that environment is suitable for studying the case. Whatever happens, he should be seen and offered help without delay.

Teach others. Ideally the physician should go with the person who calls on him in the first place, whether this is a member of the family, a friend, police official, social worker, or other agent. Particularly in the case of people who are liable to bring such problems to us again and again, it is important for us to make this a teaching experience, with the hope that the policeman or social worker will be able to handle future cases better.

Shake hands. Of course it is essential to deal with any existing physical emergency before anything else. But even before this, the physician should identify himself to the patient and greet him with a handshake if at all possible. Physical emergencies that have to be dealt with include removing a drunk person from an automobile, persuading an agitated person to hand over his gun, arresting bleeding, and pumping the stomach for poisoning.

Sit down. As soon as possible, sit down with the patient and try to get him to sit down also. Little can be accomplished as long as he, and perhaps relatives, are talking excitedly. On the other hand it is usually helpful to have a member of the family or

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friend close by. Many patients will talk to a physician if a calm member of the family remains in the room.

Get the patient to talk. The next general principle is to listen to the patient, giving him every opportunity to explain what is going on, what he feels, what he fears, and so on. Unless he starts to tell you these things spontaneously, you should ask a series of leading questions, giving him time to reply. "What is going on? What is upsetting you?", etc. If he appears angry and threatening, you should ask quite openly, "What are you so angry about?"

No secrets. Whatever you do, under no circumstances should you talk in whispers behind the patient's back. I can think of no communications that need to be exchanged between these people and the doctor which the patient should not overhear. Even the conclusion that the patient is acutely disturbed and requires to be in the hospital is much better discussed openly. Much of the disturbance which develops in such a patient is due to mishandling by people who act as if he should have no part in making decisions.

Be truthful. Never reassure the patient inappropriately. For example, don't say, "Everything is fine," or, "Nothing's the matter." Statements of this sort, which ignore the patient's actual predicament, are bound to make him lose confidence. What we should do is show that we understand that he is in a state of panic, or depression, or confusion. We should explain that we understand his problem, using simple language and persisting even if does not seem to follow. Here are some suitable sample phrases: "You seem to be frightened"; "I can see you are afraid you will lose control"; "These awful feelings you have are part of an illness; you will feel much better when we arrange some treatment for you."

Discuss plans. Once you are ready to make some recommendations, discuss them forthrightly with the patient and the family. Talk in positive terms about what will be done. For example, say: "We *will* take care of you"; "We'll see that your children are all right"; "In the hospital they will help you with this problem"; "This medicine will help you to feel better."

The Use of Controls

Sometimes you will have to make a decision regarding whether or not to apply controls to a particular patient. By controls I mean such things as administering tranquilizing or sedative drugs, actually holding him physically, placing him in a hospital, or even putting him under lock and key. The way to reach a realistic decision about this is to ask yourself what seems to be the patient's need. Some patients verbalize their fear of disaster, explosion, the end of the world. their own death or the death of other people, and by so doing are actually expressing a fear that they will go out of control. Under these circumstances firmly applied controls with a suitable explanation can be reassuring and calming. For example, you might say: "I am going to place you in the hospital and have someone stay with you all the time. Then you need not be afraid of these impulses you are feeling."

Watch for the patient whose panic has its origin in homosexual fantasies. You can surmise the presence of homosexual panic from the way the patient talks and behaves as well as from the history. If he indicates persecutory fears of men or says that his roommate is a "queer" or that men are going to abuse him, you should recognize the warning signs and avoid stimulating more panic. Such a patient should not be left alone with any one person of the same sex, and appropriate use of nursing personnel can be very helpful. A man who is in a homosexual panic with paranoid thoughts can calm down quite quickly when placed in the care of a supportive and understanding nurse.

Always explain. Keep explaining to the patient what you are doing and why. Don't forget that what may be a routine matter to you (taking a blood sample, giving an injection, or calling the emergency room of the hospital) may be misinterpreted and therefore frightening to him.

Utilize others. As much as possible enlist the help of people who are known to the pa-

tient. Have his family or friends or members of Alcoholics Anonymous stay with him. Place him in a general hospital whenever possible, and avoid using law enforcement agencies except as an absolutely last resort. Sick people do not belong in jail.

Arrange further contact. Maintain your relationship with the patient by arranging further care. Let's say that you have arranged for him to go home with his family. Your responsibility has not ended there. Make a specific appointment; write it down and hand him the paper. Remember that whatever you do for emotionally disturbed people should be on a simple level and involve concrete acts. Saying to the patient, "Give me a call next week and arrange to come to see me," is not nearly so supportive and effective as handing him a piece of paper with a specific time and place written on it.

Summary

Physicians should be guided by three major principles in handling psychiatric emergencies:

Do evaluate the situation in detail and in as relaxed way as possible.

Do all you can to help. (Ask yourself, "If I were the patient, what would I want people to do?")

Don't rush for a psychiatrist. He may be useful in arranging a treatment program later on, but right now, while an emergency exists, you are perfectly capable of handling it and should do so. One family doctor in the anxious patient's home is worth a hundred psychiatrists in the hospital ten miles away.

The Preceptorship in the Creation of the General Practitioner

Robert Shackelford, M.D.*

Mt. Olive

This paper concerns the place of the preceptorship in the creation of a general practitioner and what is being done in this regard in North Carolina.

Basic scientific data in medical education are taught by laboratory and didactic methods, and with the use of clinical material. Clinical medicine in undergraduate years, and practice area training after graduation are still taught predominantly by precept—that is, younger physicians studying and practicing under the tutelage of older and more experienced ones. Medical schools present students, graduate and undergraduate, with preceptors in every major phase of medicine except general practice—the basic function of the family physician. In order to develop general practitioners, it would seem essential that graduate and undergraduate students have experience under qualified preceptors in general practice.

In discussing preceptorships in North Carolina, I shall draw frequently from a report of the Commission on Education of the American Academy of General Practice, adopted at the April, 1964, meeting of the Congress of Delegates and published in *GP* in July, 1964. The report states the aims of a preceptorship as follows:

(a) To give insight into a medical way of life of a general practitioner in private practice in a community and to demonstrate what family practice is like, the scope of the family physician's work and problems encountered.

1. To clarify for the student the physician's place in society, his social and civic obligation, and his responsibilities to his patient.
2. To help the student grasp more fully the individual nature of private practice and the need for and the possibility of understanding each patient in relationship to his family, his job, and his total environment.

Read before the Section on General Practice of Medicine, Medical Society of the State of North Carolina, Charlotte, May 4, 1965.

*President, North Carolina Academy of General Practice.

(b) The preceptorship will provide a brief period away from Medical School, during which time the student can develop some mature ideas concerning his own values and goals. This is a time when the student can contemplate the physician's place in society, as well as his social and civic responsibilities, and his responsibilities to his profession. The preceptorship permits each student to participate almost totally in a medical way of life with a dedicated physician carefully selected by the Preceptorship Committee.

The North Carolina Program

At the present time students in all three North Carolina medical schools have the opportunity to participate in the preceptorship program sponsored by the North Carolina Academy of General Practice. To acquaint you with this program, I will contrast some of its features with the essentials of a preceptorship program outlined in the preceding report.

1. The North Carolina program is sponsored and controlled by the North Carolina Academy of General Practice, under the direction of a committee elected by the Academy. Medical students are allowed to participate in the preceptorship program during any of their free time. The schools have no representation on the Academy's Preceptorship Committee, although they do offer random advice as requested. The report suggests that ideally the program should be an integral part of the medical school curriculum and should be controlled by a faculty committee, at least one member of which should be a preceptor himself.

2. The location of preceptorships, the appointment of preceptors, and the assignment of students to preceptors are made by the Preceptorship Committee after it has screened applications from both preceptors and students, giving consideration to the preferences of each. Ideally it is suggested that this work be carried out by the medical school faculty committee, and that all preceptors should receive faculty appointments.

3. The preceptorship period now offered in North Carolina is from one to two weeks scheduled some time after the completion of the second year of medical school. The Education Commission feels that this period should be extended to at least four weeks, scheduled some time during the junior or senior year.

4. As recommended in the report, each preceptor is required to submit to the Preceptorship Committee an evaluation of each preceptee.

5. Each student is required to submit a written report on his experience during the preceptorship—also following a recommendation of the report.

6. The preceptors provide maintenance for the students but offer no other remuneration—another recommendation.

7. The preceptors are requested to treat the students as colleagues, but to make sure that patients are informed that the preceptee is a medical student studying under the guidance of an experienced physician. The report suggests that this information is more useful when it can be said that the student is under the guidance of an off-campus faculty member.

8. Preceptors under this program are instructed specifically not to relegate the student to the functions of a clinical clerk or assistant. He is not permitted to practice medicine except under the supervision of his preceptor, and he must not be left alone to cover for his preceptor even during busy periods. Again, this requirement is in accordance with the recommendations of the report.

9. The North Carolina Academy of General Practice has had the opportunity at different times to present the preceptorship program to the student bodies of the three medical schools in off hours. The report suggests that this presentation should be the responsibility of a faculty-created preceptorship committee which would give the students a full evaluation of the program at some time during their sophomore and junior years.

This year, in an effort to reach the students before their summer vacations and other free time becomes too crowded with research and clinically related activities, and before they become too indoctrinated in the

ways of institutional medicine, we are concentrating primarily on the sophomore students in each school, trying to avail them of this program between the end of their second and the beginning of their third year of medical school. We have not excluded junior and senior students, but we felt that we might get a better response from the second-year students. Meetings with these students have been enthusiastic, although as yet the actual response has not been particiularly great.

Student Evaluations

This is the third year of the North Carolina AGP preceptorship program. About ten students participated in each of the previous two summers, and we expect at least that many this summer although we would hope for a larger number.

Summaries of the students' evaluation of the program are of interest. Nearly all of the participating students considered the medical care offered by their preceptor as excellent in quality. They feel that the most valuable part of the program was the opportunity to observe general practice and to see patients not encountered in the university teaching centers. Also valuable was the opportunity to note the organization of office practice, to see a physician's life in an intimate setting, to have the practical experience of seeing illnesses diagnosed and treated without elaborate laboratory tests, and to see that, in general, a high quality of medicine can be practiced outside of a medical center. These students responded enthusiastically to the program and have volunteered to publicize it at their respective schools.

The preceptors generally found the experience gratifying from their point of view, and all agreed to continue to participate in the program. The reaction of the patients and the communities to the students was good. Most of the preceptors felt that they practiced better medicine because of the students' presence; the majority would like to see the program become a part of medical school curriculum, even if only on an elective basis. The majority felt that the presence of married student's wives during the preceptorship period gave them a better understanding of their husbands' work.

Conclusion

It is hoped that this paper has given some small idea of what is being attempted in North Carolina through the preceptorship program. The North Carolina Academy of General Practice welcomes suggestions from the Section on the General Practice of Medicine concerning the value of, and approaches to, this program. It solicits the cooperation of individual physicians, particularly in interesting students from their local communities to participate, and in encouraging medical educators to give more of their time and influence to it.

I believe that a preceptorship program is of prime importance in the development of general practicitioners, and that such a program would be valuable to any medical student, regardless of his sphere of future practice. First-hand association with individual private practice is fast being eliminated from the academic experience of our medical students, a development which could ultimately have a deleterious effect on the survival of the individual practice of medicine.

'Nonexistent' Drug Reactions

It is all very well for the profession and the public to be alert and alarmed at drug reactions, and to do everything in their power to keep these at a minimum. Nevertheless, to me . . . the pendulum has swung too much far in the other direction, to the extent that many individual members of the public, to my personal knowledge, are more concerned about nonexistent reactions than they are with the evident benefit they have obtained from the drug they are taking.—Irwin C. Winter, Ph.D., M.D., in *Journal of New Drugs*, 4: 6, (Nov-Dec) 1964

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FROM RUSSIA, WITH LOVE

The JOURNAL recently had a letter from the press department of the Soviet embassy in Washington, enclosing a carbon copy of what seemed to be part of the proceedings of a tuberculosis conference. A covering letter said that "motivated by a desire to contribute to a mutual knowledge and understanding of our two peoples," they were offering the material for publication in our JOURNAL. Since JOURNAL policy is to accept only manuscripts not under consideration elsewhere, a letter asking for fuller explanation was sent. The paper on psoriasis (published in this issue) came in reply, as an "exclusive." All of the papers were issued through the Novosti Press Agency in Moscow, an unusual channel for scientific papers in our society.

The Russian paper is published not to give our readers new insights into psoriasis, but rather an insight into the contemporary practice of medicine in that country. Since psoriasis is deemed a fit subject for ads in the daily papers, it seems to be sufficiently well known to interest all of our readership. One or two points are worth mentioning. Among the treatment methods is the use of an oil refinery waste from Nefatalan A similar product is marketed in this country, and some of those who have used the American version find it not so effective as the Russian. Another treatment is the induction of fever by a "liposaccharide"; the current PDR does not list the most recently promoted of such agents in our country.

Except for one or two typographic errors the Russian paper has not been edited; so our readers can judge the quality of the translation. If we are asked to reciprocate, we would appreciate suggestions from our readers, and translations into Russian as well. The first will no doubt outnumber the second.

* * *

NO BALM IN GILEAD

Dr. Kanner,* his head kept clear by Oteen's good air, has written a disturbing paper for this issue of the JOURNAL, disturbing because it may shatter some illusions still held by physicians about laboratory work. In his demonstration that specificity, sensitivity, and disease prevalence need to be considered when applying laboratory results to a specific patient, Dr. Kanner puts his finger on the central problem of medical diagnosis, the fact that nothing is pathognomonic of anything. It is simply because in most cases of disease there is no *single* finding which permits exact diagnosis that medical practice is so complex. For those who hope that computers will greatly aid in solving diagnostic problems, it can be said that Dr. Kanner's paper brought anguish to one research worker in that very field. How can his com-

*At press time word was received of the death of Dr. Oscar Kanner. He died August 14th of a heart attack.

puter program embrace the dilemma presented to it by a positive serologic test for syphilis? It was back to the programming desk for him.

Most experienced physicians have long abandoned the thought that there will ever be an easy path to diagnosis. They have seen diagnostic tests come and go, but their problems remain, and even increase in complexity. To paraphrase the spiritual, "there is no balm in Gilead"; better not waste time looking for any.

* * *

NORTH CAROLINA JOURNAL OF MENTAL HEALTH

The ranks of Tar Heel publications were joined recently by a quarterly journal titled as above, published by the Department of Mental Health, P. O. Box 10217, Raleigh. It may be obtained gratis from that address. The initial issue has papers by four physicians and a nurse, an editorial, and abstracts of research work in the field by North Carolina investigators. The editor, Dr. Eugene Hargrove, stresses that the journal is not intended as a house organ for the North Carolina State Department of Mental Health, but as an interdisciplinary effort which will attract contributions from workers in all related fields, physicians or not.

With over 300 psychiatrists in the state, a growing mental health program extending from the state to the community level, and increasing public interest in the field, we may look forward to the flourishing of this new journal. We wish it luck and good papers.

DIRECTING HOSPITAL TRAFFIC

Trying to keep hospital visitors from the fate of the wandering Dutchman has always been a problem, and many schemes have been devised to overcome it. The diversity of the schemes is witness to the fact that there is no pat answer. Lines on the floor, walls or ceiling are perhaps best, but then the number of collisions between people and people, and people and things, increases. Signs have their place, but it is not always the right place for every situation—not to mention the fact that some wanderers cannot read. Is there any eventual answer?

One step on the road to solution is to seek an etiology. Architecture is partly at fault, in many places. Hospitals have a tendency to grow like rock candy, and in many there is no good way to get from one part to another. Sometimes nothing short of wrecking will help. Proper labeling of doors and other easily defined places is good. But even fine labels, written in immense letters, well-lit and properly placed, will leave a significant number of people adrift.

The fact is that psychologic reasons underlie many of these difficulties. People who come to hospitals are usually distracted by their own illness or that of a friend or relative. Hospitals have a tinge of intimidation about them, and people trying to find their way respond best when spoken to in friendly fashion by another human being. Sometimes they need to be led along to where they are going. Inefficient, yes; shouldn't be needed, yes—but this might be one of the best ways to put hospital volunteers to work (once they are able to find their way around).

Our own insecurity in life's varying probabilities provides the wry humor of Samuel Butler's observation that the art of living consists of being able to form adequate conclusions from inadequate evidence.—Alan Gregg in *Challenges to Contemporary Medicine*, Columbia University Press, 1956, pp. 83-84.

The President's Page

RELATIVE VALUE SCHEDULE

The California Relative Value Study, now adopted by the Medical Society of the State of North Carolina for use by its membership, was arrived at by computation of the average fees customarily charged for each of the listed procedures. It does not attempt to establish *fees,* in any sense, but simply to establish proper relativity between the charges made for one procedure and another. The schedule simply provides the physician with a list of numbers, whereby, by simple arithmetical multiplication of those numbers by *his own evaluation of his own unit,* he can put his procedures in what we take to be proper relativity.

It is our belief that this will tremendously improve efficiency and public relations and agency negotiations in North Carolina. It certainly will make for consistency of charges in one's own practice and, assuming consistency of attitude and evaluation, it will make for local consistency, in regard to charges. It will, in the future we believe, be an essential factor in negotiation with State and Federal agencies whereby we may arrive at a proper unit value for services rendered these organizations, and it certainly will vastly help them in the creation of schedules which are, procedure by procedure, in proper relationship. We hope that commercial insurance companies will gradually adopt the principles of the Relative Value Schedule in arriving at their schedules, which heretofore have had a top value figure, not necessarily in proper relation with lower cost procedures in the schedule.

One of the disturbing things about the reception of local specialty organizations to the concept of relative value study is their failure to understand that they are not being offered a schedule of fees, but simply a schedule of proper *relativity* of fees. This should be clear if one realizes that a given doctor may elect a $5.00 value per unit. This would mean that the charge for an appendix would be $200.00 (5 x 40) and by the same token, applying the $5.00 unit to the number assigned gastrectomy, the fee would be $400.00 (5 x 80). The idea is to be consistent in the application of the value assigned the unit throughout the schedule.

Specialty organizations have felt that their organizations should establish unit value before approving the schedule, and this, of course, is far from the truth. The unit value may vary from community to community, or from doctor to doctor, and certainly will vary from agency to agency and insurance schedule to insurance schedule. Thus, Vocational Rehabilitation may elect a surgical unit value of two (2) and should then be consistent in its application of this unit value to the whole surgical schedule. The unit value elected by agency or insurance company may be thoroughly unsatisfactory from the standpoint of the physician, but this is not related to the essence of the relative value study at all. Negotiation may induce changes in amounts assigned to units.

As far as I personally am concerned, the use of the relative value study in the office is extremely satisfactory. I have often had the feeling that there was some inconsistency in the amount I charged for one procedure as compared with that for another, and now, by reference to the schedule, I can find the proper relative unitage for a procedure, and, taking a $5.00 unit, I can arrive at what seems to be a properly relative fee for such procedure. In some localities and in some types of practice, one might conceivably elect a unit of six (6) or seven (7), or four (4) or three (3).

Insurance companies, in creating schedules, will, I hope, find the relative value study of inestimable value, because they will, by using it, be able to properly relate values of all procedures to each other. This might, in time, remove the obvious inequity of a more or less satisfactory charge for the lower priced procedures and a totally unsatisfactory charge for the more expensive ones.

How Much?

No household goes long without at least one of the items pictured here. Altogether, they cost as much as a pair of bandage scissors.

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DESIGNED TO MEET PRESENT DAY NEEDS

PLANS UP TO

- $250.00 WEEKLY DISABILITY INCOME BENEFITS ($1,080.00 monthly)
- $20.00 PER DAY EXTRA HOSPITAL BENEFIT (Optional)

PLAN L-7 (Basic)

SEMI-ANNUAL PREMIUMS

Lifetime Accident and 7 years Sickness

Weekly Benefits	Dismemberment Benefits	Principal Sum For Accidental Death	Premium Age 40 and Over	†Reduced Premium To Age 40
$250.00	Up to $50,000.00	$5,000.00	$244.50	$183.50
$200.00	Up to $40,000.00	$5,000.00	$196.50	$147.50
$150.00	Up to $30,000.00	$5,000.00	$148.50	$111.50
$100.00	Up to $20,000.00	$5,000.00	$100.50	$ 75.50

PLAN L-65 (Long Term)

SEMI-ANNUAL PREMIUMS

Lifetime Accident and For Sickness, from Inception of Disability to Your Attainment of Age 65

Weekly Benefits	Dismemberment Benefits	Principal Sum For Accidental Death	Premium Age 40 and Over	†Reduced Premium To Age 40
$250.00	Up to $50,000.00	$5,000.00	$292.00	$219.25
$200.00	Up to $40,000.00	$5,000.00	$234.50	$176.00
$150.00	Up to $30,000.00	$5,000.00	$177.00	$133.00
$100.00	Up to $20,000.00	$5,000.00	$119.50	$ 89.75

The premiums for Plan L-65 will be reduced to the same premium as for Plan L-7 at age 58.

Note: The above rates **do not** increase at age 50, or even at age 60!

†On attaining age 40, age 40 rates apply on renewal.

J. L. CRUMPTON,
State Mgr.

Professional Group Disability Division
COMMERCIAL INSURANCE COMPANY OF NEWARK, N. J.
Box 147, Durham, N. C.
J. Slade Crumpton, Field Representative

If more information is needed or help desired in completing your enrollment, please call us collect:
Area Code 919—Phone 682-5497.

From a practical standpoint, the Medical Society office will provide members a copy of the adopted California Relative Value Study for a nominal charge, and there is, in each specialty section, a quite clear statement of how to use the schedule. I urge your interest, concern and cooperation in regard to the use of this important instrument.

Your Ad Hoc Committee has for the past several years worked many tireless and thankless hours in the preparation of the schedule which now offers hope of widespread utilization. The chairman, Dr. Alfred Hamilton, from whom the material of the above statement was obtained, and all members of the Committee, deserve the gratitude of all segments of our Society who have occasion to use it. The Committee is now discharged with commendation for a job exceedingly well done. From time to time, I am sure, the schedule will merit review. At such a time the Committee can be re-activated. I trust all concerned will give it an honest trial.

GEORGE W. PASCHAL, JR., M.D.

Committees & Organizations

Schedule of Committee and Commission Appointments, 1965-66

NOTE: The Committees listed herein have been authorized by President George W. Paschal, Jr., M.D., and/or are required under the Constitution and By-Laws.

Particular note should be taken of the authorization of the House of Delegates of a Commission form of organizational activity and that all Committees, excepting Committee on Nomination, Committee on Negotiation, and Committee on Grievances, are segregated under the respective Commission in which the function of the committee logically rests. This will tend to eliminate overlapping and duplication in activity programs and result in coordination of the work of the Society in a manner to lessen the work of the delegates in the Annual Meeting of the House of Delegates

(The President, Secretary and Executive Director of the Society are ex-officio members of all Committees and, along with the Commission Chairman, should receive notice of meetings, agenda and minutes of committee meetings during the activity year.)

I. ADMINISTRATION COMMISSION
Wayne J. Benton, M.D., *Chairman*
2320 Battleground Road, Committee
Greensboro, North Carolina. Listing

1. **Finance, Committee on (I-1)** #17
Wayne J. Benton, M.D., *Chairman*
2320 Battleground Road,
Greensboro.

2. **Headquarters Facility, Committee on (I-2)** #19
A. Hewitt Rose, Jr., M.D., *Chairman*
2009 Clark Avenue, Raleigh

II. ADVISORY AND STUDY COMMISSION
W. Howard Wilson, M.D., *Chairman*
403 Professional Building
Raleigh, North Carolina

1. **Auxiliary Advisory and Archives of Medical Society History, Committee on. (II-1)** #1
Roscoe D. McMillan, M.D., *Chairman*
Box 232, Red Springs.

2. **American Medical Education & Research Foundation, Committee on (AMERF) II-2** #2
H. B. Underwood, M.D., *Chairman*
709 West End Avenue, Statesville.

3. **Blue Shield, Committee on (II-3)** #8
Max P. Rogers, M.D., *Chairman*
624 Quaker Lane, High Point

4. **Constitution & By-Laws, Committee on (II-4)** #12
Louis deS. Shaffner, M.D., *Chairman*
300 South Hawthrone Road,
Winston-Salem

5. **Industrial Commission of North Carolina, Committee to Work with (II-5)** #21
James S. Mitchener, Jr., M.D., *Chairman*
Box 1599, Laurinburg

6. **Marriage Counselling, Committee Advisory to (II-6)** #25
Rachel D. Davis, M.D., *Chairman*
111 E. Gordon Street, Kinston

7. **Medical Care of Dependents of Members of Armed Forces, Committee on (MEDICARE) (II-7)** #28
David M. Cogdell, M.D., *Chairman*
911 Hay Street, Fayetteville.

8. **Student A.M.A. Chapters, Committee Advisory to (II-8)** #44
Wm. P. J. Peete, M.D., *Chairman*
Duke Hospital, Durham.

III. ANNUAL CONVENTION COMMISSION
Paul F. Maness, M.D., *Chairman*
328 W. Davis Street
Burlington, North Carolina

1. **Arrangements, Committee on (III-1)** #4
Charles W. Styron, M.D., *Chairman*
615 St. Mary's St., Raleigh.
2. **Audio-Visual Scientific Postgraduate Instruction, Committee on (III-2)** #6
John C. Grier, Jr., M.D., *Chairman*
Carthage Rd., Pinehurst.
3. **Awards, Committee on (III-3)** #7
Lester A. Crowell, Jr., M.D., *Chairman*
South Aspen St., Lincolnton.
4. **Credentials, Committee on—Delegates to House of Delegates (III-4)** #13
Charles B. Wilkerson, Jr., M.D., *Chairman*
100 S. Boylan Avenue, Raleigh.
5. **Exhibits, Committee on Scientific (III-5)** #15
Robert E. Miller, M.D., *Chairman*
1822 Brunswick Avenue, Charlotte
6. **Scientific Works, Committee on (III-6)** #43
David C. Sabiston, Jr., M.D., *Chairman*
Duke University Medical Center, Durham

IV. PROFESSIONAL SERVICE COMMISSION
Mark McD. Lindsey, M. D., *Chairman*
Hamlet Hospital
Hamlet, North Carolina

1. **Disaster Medical Care, Committee on (IV-1)** #14
William G. Anlyan, M.D., *Chairman*
Duke Hospital, Durham
2. **Eye Care and Eye Bank, Committee on (IV-2)** #16
L. B. Holt, M.D., *Chairman*
2240 Cloverdale Ave., Winston-Salem.
3. **Insurance, Committee on Professional (IV-3)** #22
James Franklin Martin, M.D., *Chairman*
1309 S. Kerr Avenue, Wilmington
4. **Necrology, Committee on (IV-4)** #31
Charles H. Pugh, M.D., *Chairman*
Box 1478, Gastonia
5. **Nursing, Committee of Physicians on (IV-5)** #34
Fred C. Hubbard, M.D., *Chairman*
408 8th Street, N. Wilkesboro.
6. **Retirement Savings Plan Committee (IV-6)** #40
Jesse Caldwell, M.D., *Chairman*
114 W. Third Ave., Gastonia.

V. PUBLIC RELATIONS COMMISSION
David G. Welton, M.D., *Chairman*
1012 Kings Drive, Charlotte

1. **Association of Professions, Committee on (V-1)** #5
John R. Kernodle, M.D., *Chairman*
Kernodle Clinic, Burlington
2. **Hospital & Professional Relations, and Liaision to North Carolina Hospital Association, Committee on (V-2)** #20
James S. Raper, M.D., *Chairman*
Doctors Bldg., Asheville
3. **Insurance Industry Liaison Comittee (V-3)** #23
Frank W. Jones, M.D., *Chairman*
Catawba Hospital, Newton
4. **Legislation, Committee on (V-4)** #24
Edgar T. Beddingfield, Jr., M.D., *Chairman*
Community Clinic, Stantonsburg
5. **Medical-Legal Committee (V-5)** #27
Julius A. Howell, M.D., *Chairman*
Bowman Gray, Winston-Salem
6. **Motor Vehicles, Advisory Committee to Department of (V-6)** #30
Simmons I. Patrick, M.D., *Chairman*
400 Glenwood Avenue, Kinston
7. **Pharmacy, Committee Liaison to N. C. Association (V-7)** #36
John T. Dees, M.D., *Chairman*
Box 248, Burgaw
8 **Public Relations, Committee on (V-8)** #38
Philip Naumoff, M.D., *Chairman*
1012 Kings Drive, Charlotte
9 **Rural Health, Committee on (V-9)** #41
Edward L. Boyette, M.D., *Chairman*
P. O. Box 65, Chinquapin
10. **Utilization Committee (V-10)** #45
H. Fleming Fuller, M.D., *Chairman*
Kinston Clinic, Kinston

VI. PUBLIC SERVICE COMMISSION
Thomas G. Thurston, M.D., *Chairman*
512 Mocksville Avenue,
Salisbury, North Carolina.

1. **Anesthesia Study, Committee on (VI-1)** #3
Luther C. Hollandsworth, M.D., *Chairman*
Willow Terrace Apts, Apt #6
Chapel Hill
2. **Cancer, Committee on (VI-2)** #9
D. E. Ward, Jr., M.D., *Chairman*
2604 North Elm St., Lumberton.
3. **Child Health & Poliomyelitis, Committee on (VI-3)** #10
Richard S. Kelly, M.D., *Chairman*
1606 Morganton Rd., Fayetteville.
4. **Chronic Illness, Tuberculosis and Heart Disease, Committee on (VI-4)** #11
Daniel A. McLaurin, M.D., *Chairman*
Garner Professional Center
P. O. Box 36, Garner
5. **Maternal Health, Committee on (VI-5)** #26
W. Joseph May, M.D., *Chairman*
(and Secretary)
121 Professional Bldg., Winston-Salem.
6. **Mental Health Medicine and Religion, Committee on (VI-6)** #29
John L. McCain, M.D., *Chairman*
Wilson Clinic, Wilson.
7. **Occupational Health, Committee on (VI-7)** #35
Benjamin W. Goodman, M.D., *Chairman*
24 Second Avenue, N. E., Hickory

8. Physical Rehabilitation, Committee on (VI-8) #37
Walter S. Hunt, Jr., M.D., *Chairman*
600 Wade Avenue, Raleigh.

9. Public Welfare, Committee Advisory to the Dept. of (VI-9) #39
Bruce B. Blackmon, M.D., *Chairman*
Buies Creek

10. School Health, Committee on (VI-10) #42
Michael F. Keleher, M.D., *Chairman*
311 Doctors Bldg., Asheville

11. Venereal Disease, Committee on (VI-11) #46
Howard Paul Steiger, M.D., *Chairman*
1600 E. 5th Street, Charlotte

VII. NOMINATIONS, COMMITTEE ON (Not a commission constitutionally provided) #33
John C. Burwell, Jr., M.D., *Chairman*
1026 Professional Village, Greensboro

VIII. GRIEVANCES, COMMITTEE ON (Not a Commission By-Law provided) #18
Amos N. Johnson, M.D., *Chairman*
Garland

IX. NEGOTIATIONS, COMMITTEE ON (Not a commission By-Law provides) #32
William F. Hollister, M.D., *Chairman*
Pinehurst Surgical Clinic, Pinehurst

1. Committee Advisory to the Auxiliary and Archives of Medical Society History (11) II-1
Roscoe D. McMillan, M.D., *Chairman,* Box 232, Red Springs.
C. T. Wilkinson, M.D., Co-Chairman, 209 Wilkinson Bldg., Wake Forest
E. W. Furgurson, M.D., Plymouth Clinic, Plymouth
Doris B. Hammett, M.D., 104 Broadview Road, Waynesville.
Amos N. Johnson, M.D., Box 158, Garland
Ruth Leonard, M.D., 106 W. 7th Street, Charlotte 2.
Harvey C. May, M.D., 1524 Elizabeth Avenue, Charlotte 4.
Rose Pully, M.D., 1007½ N. College Street, Kinston.
John C. Reece, M.D., Grace Hospital, Morganton.
Ben F. Royal, M.D., 1612 Evans Street, Morehead City
Warner Wells, M.D., N. C. Memorial Hospital, Chapel Hill.

2. Committee on American Medical Education and Research Foundation (AMERF) (5) II-2
Harry B. Underwood, M.D., *Chairman,* 709 West End Avenue, Statesville.
Eben Alexander, Jr., M.D., Bowman Gray, Winston-Salem
William L. Fleming, M.D., UNC School of Medicine, Chapel Hill
Benjamin F. Huntley, M.D., Professional Bldg., Winston-Salem
Wm. P. J. Peete, M.D., Duke Hospital, Durham.

3. Committee on Anesthesia Study (11) VI-1
Luther C. Hollandsworth, M.D., *Chairman,* Sherwood Forest, Chapel Hill
Beverly W. Armstrong, M.D., 106 W. 7th Street, Charlotte 2.
Howard M. Ausherman, M.D., Box 10157, Charlotte.
D. LeRoy Crandell, M.D., N. C. Baptist Hospital, Winston-Salem
John C. Doerr, M.D., 621 W. Jones Street, Raleigh
Joseph S. Hiatt, Jr., M.D., 208 S. W. Broad Street, Southern Pines.
John R. Hoskins, III, M.D., 203 Doctors Bldg., Asheville.
Ben C. Ogle, M.D., Gaston Memorial Hospital, Gastonia
Will Camp Sealy, M.D., Duke Hospital, Durham.
Charles R. Stephen, M.D., Box 3535, Duke Hospital, Durham.
Thomas B. Wilson, M.D., Rex Hospital, Raleigh.

4. Committee on Arrangements (3) (7 Consultants) III-1
Charles W. Styron, M.D., *Chairman,* 615 St. Mary's Street, Raleigh.
George G. Gilbert, M.D., 309 Doctors Bldg., Asheville
John R. Hoskins, III, M.D. (local chairman), 140 W. Doctors Bldg., Asheville
Chalmers R. Carr, M.D. (consultant), 1822 Brunswick Avenue, Charlotte
T. S. Raiford, M.D., (consultant), 301 Doctor's Bldg., Asheville

CONSULTANTS: (Standing Committees)
David C. Sabiston, Jr., M.D., Chrmn. Com. on Scientific Works, Duke Univ. Medical Center, Durham
Robert E. Miller, M.D., Chrmn., Com. on Scientific Exhibits, 1822 Brunswick Avenue, Charlotte
John C. Grier, Jr., M.D., Chrmn., Com. on Audio-Visual PG Instr., Carthage Road, Pinehurst
Lester A. Crowell, Jr., M.D., Chrmn., Com. on Awards, South Aspen St., Lincolnton
Charles B. Wilkerson, Jr., M.D., Chrmn., on Credentials, 100 S. Boylan Ave., Raleigh

5. Committee on Associations of Professions (6) (7 consultants) V-5
John R. Kernodle, M.D., *Chairman,* Kernodle Clinic, Burlington
George G. Gilbert, M.D., 1 Doctors Park, Asheville
J. C. Hamrick, M.D., P. O. Box 28, Shelby
Philip Naumoff, M.D., 1012 Kings Drive, Charlotte
John S. Rhodes, M.D., 700 W. Morgan

Street, Raleigh
Thomas G. Thurston, M.D., 512 Mocksville Ave., Salisbury
CONSULTANTS:
Dewey H. Bridger, M.D., Bladenboro
H. Fleming Fuller, M.D., Kinston Clinic, Kinston
Jack E. Mohr, M.D., P. O. Box 431, Lumberton
Thomas P. Nash, III, M.D., Medical Bldg., Elizabeth City
Fred Wm. Payne, Jr., M.D., 404 Falls Rd., Rocky Mount
Walter T. Tice, M.D., 624 Quaker Lane, High Point
David G. Welton, M.D., 1012 Kings Drive, Charlotte

6. **Committee on Audio-Visual Postgraduate Instruction (7) III-2**
John C. Grier, Jr., M.D., *Chairman,* Carthage Road, Pinehurst.
Paul McB. Abernethy, M.D., Medical Village, Burlington.
William H. Burch, M.D., Box 67, Bat Cave
Robert S. Boatwright, Haywood Co. Hosp., Waynesville
Marius H. Wells, M.D., 202 S. Caldwell Street, Brevard
William W. Shingleton, M.D., Duke Hospital, Durham.
J. O. Williams, M.D., Cabarrus Memorial Hospital, Concord.

7. **Committee on Scientific Awards (9) (1 Consultant) III-3**
Lester A. Crowell, Jr., M.D., *Chairman* (1967), South Aspen Street, Lincolnton
William H. Boyce, M.D., (1966), Bowman Gray, Winston-Salem.
J. Desmond Coughlin, M.D., (1966), 309 Doctors Bldg., Asheville.
Alton J. Coppridge, M. D., (1967), 1200 Broad Street, Durham.
James E. Hemphill, M.D., (1968), Richmond County Memo. Hosp., Rockingham
Livingston Johnson, M.D., (1967), 404 W. Warren Street, Shelby
Jack Powell, M.D., (1968), 190 W. Doctors Bldg., Asheville
William A. Brewton, M.D., (1968), P. O. Box 158, Enka
John K. Williford, M.D., (1966), 900 9th Street, Lillington.
Mr. Emory S. Hunt (Consultant), UNC—Box 1020, Chapel Hill

8. **Committee on Blue Shield (9) (4 consultants) II-3**
Max P. Rogers, M.D., *Chairman,* (1967), 624 Quaker Lane, High Point.
Roy S. Bigham, Jr., M.D., (1966), 1709 East Fourth Street, Charlotte.
Robert Perry Crouch (1967), Central Medical Bldg., Asheville
Willard C. Goley, M.D. (1968), 214 N. Market Street, Graham
William A. Hoggard, M.D., (1966), 1502 Carolina Avenue, Elizabeth City.
George W. Holmes, M.D., (1966), 2240 Cloverdale Ave., Winston-Salem.
Frederick C. Hubbard, M.D. (1967), 408 8th Street, N. Wilkesboro
Richard S. Kelly, M.D. (1968), 1606 Morganton Road, Fayetteville
C. Ronald Stephens, M.D., (1968), Duke Hospital, Durham
Consultants:
Howard M. Ausherman, M.D. (Anes.), Box 10157, Charlotte
George M. Cooper, Jr., M.D., (OALR), 201 Bryan Bldg., Raleigh.
Samuel L. Elfmon, M.D., (IM), 225 Green Street, Fayetteville
Louis L. Klostermyer, M.D. (R), 103 Doctors Bldg., Asheville

9. **Committee on Cancer (11) (Legal 1-ea. Congressional District) VI-2)**
D. E. Ward, Jr., M.D., *Chairman* (7th) 2604 North Elm Street, Lumberton
William R. Bosien, M.D., (11th), 100 Jervey Rd., Tryon
W. G. Byerly, Jr., M.D., (10th), 24 2nd Avenue, N. E., Hickory
Charles E. Flowers, M.D., (6th), N. C. Memorial Hospital, Chapel Hill.
Charles I. Harris, Jr., M.D., (1st), Martin General Hospital, Williamston.
Philip R. Mason, M.D., (9th), 303 Davie Avenue, Statesville
Mark McD. Lindsey, M.D., (8th), Hamlet Hospital, Hamlet.
Robert Page Morehead, M.D., (5th), Bowman Gray, Winston-Salem
Cornelius T. McDonald, M.D., (3rd), 810 E. Ash Street, Goldsboro.
Samuel L. Parker, M.D., (2nd), Kinston Clinic, Kinston.
Lewis S. Thorpe, M.D., (4th), 404 Peachtree Street, Rocky Mount

10. **Committee on Child Health & Poliomyelitis (13) VI-3**
Richard S. Kelly, M.D., *Chairman,* 1606 Morganton Road, Fayetteville.
Katherine Anderson, M.D., 138 N. Hawthorne Road, Winston-Salem.
Frederick A. Blount, M.D., 2240 Cloverdale Ave., Winston-Salem
Dan P. Boyette, Jr., M.D., 217 W. Main Street, Ahoskie.
Harrie R. Chamberlin, M.D., UNC School of Medicine, Chapel Hill.
Floyd W. Denny, Jr., M.D., Univ. of N. C., Chapel Hill
Jacob Koomen, M.D., State Board of Health, Raleigh.

Arthur H. London, Jr., M.D., 306 S. Gregson Street, Durham.
Angus M. McBryde, Sr., M.D., 809 W. Chapel Hill Street, Durham.
Mary Helen McConnell, M.D., 675 Biltmore Ave., Asheville
P. J. McElrath, M.D., 500 St. Mary's St., Raleigh
John W. Nance, M.D., 401 Cooper Drive, Clinton.
Robert F. Young, M.D., Halifax County Health Dept., Halifax.

Subcommittee on Immunization and Inoculation (10)

Richard S. Kelly, M.D., Chairman, 1606 Morganton Road, Fayetteville
Roy D. Daniels, M.D., Eastgate, Sylva
E. H. Ellinwood, M.D., 300 E. Northwood St., Greensboro
Samuel E. Forbis, M.D., Duke Hospital, Durham
Alexander F. Goley, M.D., 1509 Vaughn Rd., Burlington
L. W. Hamrick, M.D., 194 Lake Concord Rd., Concord
J. D. Larson, Jr., M.D., 410 East Main Street, Sanford
Frank H. Longino, M.D., 1800 W. 5th Street, Greenville
Angus M. McBryde, Sr., M.D., 809 W. Chapel Hill St., Durham
George A. Watson, M.D., 306 S. Gregson St., Durham

11. **Committee on Chronic Illness, Including Tuberculosis and Heart Disease (15) (6 consultants) VI-4**

Daniel A. McLaurin, M.D., *Chairman,* Box 36, Garner
Edward G. Bond, M.D., Chowan Medical Center, Edenton
Thomas P. Brinn, M.D., 118 W. Market Street, Hertford.
George W. Brown, M.D., 102 Brown Ave., Hazelwood
Milton S. Clark, M.D., 401 Wachovia Bank Bldg., Goldsboro
John Dewey Dorsett, Jr., M.D., 211 Hawthorne Lane, Charlotte
O. David Garvin, M.D., Health Department, Chapel Hill.
Paul Edward Hill, M.D., Wells Bldg., Murphy
William B. Jones, M.D., State Board of Health, Raleigh
Thomas D. Long, M.D., Box 77, Roxboro
John M. Mewborn, M.D., 108 S. Green Street, Farmville.
John W. Nance, M.D., 401 Cooper Drive, Clinton
Waldemar C. A. Sternberger, M.D., 1400 Scott Ave., Charlotte
George F. Verdone, M.D., 1012 Kings Drive, Charlotte.
Donald D. Weir, M.D., N. C. Memorial Hospital, Chapel Hill.

Consultants:

Charles N. Feezor, M.D., 729 Barker St., Salisbury
William H. Gentry, M.D., N. C. Sanatorium, McCain
Isa C. Grant, M.D., Box 651, Elizabeth City
Michael A. McCall, M.D., 411 Fleming Ave., Marion
C. Glenn Sawyer, M.D., Bowman Gray, Winston-Salem
Lynwood E. Williams, M.D., Kinston Clinic, Kinston.

12 **Committee on Constitution & By-Laws (5) II-4**

Louis deS. Shaffner, M.D., *Chairman,* 300 S. Hawthorne Road, Winston-Salem
H. J. Carr, Jr., M.D., 405 Cooper Drive, Clinton.
William F. Hollister, M.D., Pinehurst Surgical Clinic, Pinehurst
Edward W. Schoenheit, M.D., 46 Haywood Street, Asheville.
Charles A. Wilkinson, M.D., 2604 N. Elm Street, Lumberton

13. **Committee on Credentials of Delegates to House of Delegates (3) III-4**

Charles B. Wilkerson, M.D., *Chairman,* 100 S. Boylan Avenue, Raleigh.
Robert M. Whitley, Jr., M.D., 144 Coast Line Street, Rocky Mount.
T. Tilghman Herring, M.D., Wilson Clinic, Wilson

14. **Committee on Disaster Medical Care (7) IV-1**

William G. Anlyan, M.D., *Chairman,* Duke Hospital, Durham
George A. Watson, M.D., *Co-Chairman,* 306 S. Gregson Street, Durham
Jesse Meredith, M.D., Bowman Gray, Winston-Salem
Robert E. Miller, M.D., 1822 Brunswick Avenue, Charlotte.
W. D. Rippy, M.D., 1610 Vaughn Road, Burlington.
Warner Wells, M.D., N. C. Memorial Hospital, Chapel Hill

15. **Committee on Scientific Exhibits (8) III-5**

Robert E. Miller, M.D., *Chairman,* 1822 Brunswick Avenue, Charlotte
Alfred Robert Cordell, M.D., Bowman Gray, Winston-Salem
George G. Gilbert, M.D., 1 Doctors Park, Asheville
J. Leonard Goldner, M.D., Duke Hospital, Durham
John G. Kerr, M.D., Leicester
James F. Newsome, M.D., N. C. Memorial Hospital, Chapel Hill

Max P. Rogers, M.D., 624 Quaker Lane, High Point
Frederick H. Taylor, M.D., 1012 Kings Drive, Charlotte

16. **Committee on Eye Care and Eye Bank (8) IV-2**
L. B. Holt, M.D., *Chairman,* 2240 Cloverdale Avenue, Winston-Salem
Lloyd W. Bailey, M.D., 147 N. E. Main St., Rocky Mount.
Daniel S. Currie, Jr., M.D., 111 Bradford Avenue, Fayetteville
E. W. Larkin, Jr., M.D., 211 Market Street, Washington
Marvin N. Lymberis, M.D., 106 W. 7th Street, Charlotte 2.
George T. Noel, M.D., 211 Raleigh Bldg., Kannapolis
Paul J. Simel, M.D., 914 N. Elm Street, Greensboro
J. David Stratton, M.D., 1012 Kings Drive, Charlotte 7

17. **Committee on Finance (3) I-1**
Wayne J. Benton, M.D., *Chairman,* 2320 Battleground Road, Greensboro.
Elias S. Faison, M.D., 1012 Kings Drive, Charlotte.
T. Tilghman Herring, M.D., Wilson Clinic, Wilson.

18. **Committee on Grievances (5) (1st Five Past Presidents) VIII-0**
Amos N. Johnson, M.D., *Chairman,* Box 158. Garland
Theodore S. Raiford, M.D., *Secretary,* 301 Doctors Bldg., Asheville
John S. Rhodes, M.D., *Secretary,* 700 W. Morgan Street, Raleigh
John R. Kernodle, M.D., Kernodle Clinic, Burlington
Claude B. Squires, M.D., 225 Hawthorne Lane, Charlotte.

19. **Committee on Headquarters Facility (7) I-2**
A. Hewitt Rose, Jr., M.D., *Chairman,* 2009 Clark Avenue, Raleigh
Lenox D. Baker, M.D., Duke Hospital, Durham
Elias S. Faison, M.D., 1012 Kings Drive, Charlotte
Thomas P. Brinn, M.D., 118 W. Market Street, Hertford
Mallory A. Pittman, M.D., Wilson Clinic, Wilson
W. Wyan Washburn, M.D., Box 248, Boiling Springs
Alexander Webb, Jr., M.D., 515 St. Mary's St., Raleigh

20. **Committee on Hospital and Professional Relations and Liaison to North Carolina Hospital Association (10) V-2**
James S. Raper, M.D., *Chairman,* (10th), Doctors Bldg., Asheville
Jack W. Wilkerson, M.D., *Co-Chairman* (4th), Community Clinic, Stantonsburg.
Fred C. Hubbard, M.D. (8th), 408 8th Street, N. Wilkesboro.
Frank W. Jones, M.D. (9th), Catawba Hospital, Newton.
H. Lee Large, Jr., M.D. (7th), Presbyterian Hospital, Charlotte.
Glenn C. Newman, M.D. (3rd), Cooper Drive, Clinton.
W. T. Parrott, Jr., M.D. (2nd), 109 East Gordon Street, Kinston.
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21. **Committee to Work with North Carolina Industrial Commission (13) II-5**
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22. **Committee on Professional Insurance (10) IV-3**
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23. **Insurance Industry Liaison Committee (16) V-3**

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24. **Committee on Legislation (3) (plus President & Secretary) (State and National consultants) V-4**

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25. **Committee Advisory to Marriage Counselling (8) II-6**

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26. **Committee on Maternal Health (14) (6-yr. terms) VI-5**

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27. Medical-Legal Committee (8) V-5

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28. Committee on Medical Care Armed Forces Dependents ("MEDICARE") (35) II-7

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29. Committee on Mental Health Medicine and and Religion (21) VI-6

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30. **Committee Advisory to N. C. Department of Motor Vehicles (5) V-6**
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31. **Committee on Necrology (5) IV-4**
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32. **Committee on Negotiations (3) IX-0 (6-yr terms)**
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34. **Committee of Physicians on Nursing (8) IV-5**
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35. **Committee on Occupational Health (11) VI-7**
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38. **Committee on Public Relations (4) (6 consultants) V-8**
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39. **Committee Advisory to N. C. Department of Public Welfare (9) VI-9**
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40. **Retirement Saving Plan Committee (7) IV-6**
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41. **Committee on Rural Health (10) V-9**
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42. **Committee on School Health and State Coordinating Service (8) VI-10**
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43. **Committee on Scientific Works (5) (plus Section Chairmen as Consultants) III-6**
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(Anes) C. Max Drummond, M.D., Baptist Hospital, Winston-Salem
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44. Committee Advisory to Student AMA Chapters in North Carolina (14) II-8
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45. Utilization Committee (9) V-10
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46. Committee on Venereal Disease (5) VI-11
Howard Paul Steiger, M.D., *Chairman*, 1600 E. 5th Street, Charlotte.
Sherwood W. Barefoot, M.D., co-chairman, 1030 Professional Village, Greensboro.
William L. Fleming, M.D., UNC School of Medicine, Chapel Hill
Jacob Koomen, M.D., State Board of Health, Raleigh
Charles M. Norfleet, M.D., Bowman Gray, Winston-Salem.

SPECIAL REPORT
One Hundred Fourteenth Annual Session American Medical Association New York City, June 20-24

The American Medical Association's 114th Annual Convention was held in New York, June 20-24, 1965. Dr. James Z. Appel, Lancaster, Pennsylvania, was installed as President for the coming year. Dr. Charles L. Hudson of Cleveland, Ohio, a member of the AMA Board of Trustees since 1961, was named President-Elect.

The 1965 AMA Distinguished Service Award was won by Dr. Tinsley R. Harrison of Birmingham, Alabama, for his outstanding work in the field of cardiovascular diseases.

In general, this was a most successful convention. Out of a total of 64,517 registrants attending, 24,268 were physicians.

During the four-day session, many controversial issues were discussed, the most important ones being health care legislation and the suggested activities and actions of the House of Delegates. Ten resolutions and portions of the inaugural address were directed to this area. After much discussion, the following statements were adopted:

"The physicians of the United States of America pledge themselves to continue their search

and activity, in whatever social environment may develop, to secure or to restore the freedom, high quality and availability of medical care which has been traditional in our country.

"When the fate of the pending medicare legislation is determined, this House will review, in special session if necessary, the effect of the law and take whatever action is deemed necessary.

"In keeping with the testimony before your Committee, and the expressed policies of the House, this action should in **no way** be interpreted as a change in Section 6 of the 'Principles of Ethics' of the American Medical Association which plainly states: 'A physician should not dispose of his services under terms or conditions which tend to interfere with or impair the free and complete exercise of his medical judgment and skill or tend to cause a deterioration of the quality of medical care'; and that this House of Delegate reaffirm the principles of the Bauer amendment adopted in 1961.

"The House of Delegates reaffirm the nine principles for standards of health care programs as adopted by the House of Delegates in its special meeting February 7, 1965, and amended to read as follows:

(1) No person needing health care shall be denied such care because of the inability to pay for it.
(2) It is appropriate that government revenues be used to finance health care when other resources have been found to be inadequate.
(3) Every level of government, municipal, county, state and federal, should assume a responsible share in the financing of such programs.
(4) The health care provided by such programs should be adequate and should be equal to that available to those who can afford to pay.
(5) Maximum use should be made of voluntary prepayment and insurance mechanisms.
(6) Administration of such programs should be the responsibility of the state government. Participating states should be required to meet adequate standards of administration in order to qualify for federal funds.
(7) Eligibility requirements for benefits should be fair, realistic, uncomplicated and practical.
(8) Any such health care programs should provide funds only, and not direct services.
(9) Funds for such programs may come from general tax revenues and not from social security taxes."

As an outcome of this and other actions referable to legislation, the House adopted another resolution which included the following statement:

"This House of Delegates restates its offer to meet with the President of the United States through our Legislative Task Force to discuss proposed medical care legislation with a view to safeguarding the continued provision of the highest quality and availability of medical care to the people of the United States.

"The House of Delegates of the American Medical Association instruct the Board of Trustees of the American Medical Association to embark immediately on active campaign to inform the membership of the American Medical Association of the grave considerations in adhering to our principles of ethics posed by legislation now pending before Congress.

"The American Medical Association strongly urge those branches of the government interested in the formulation, the enactment, and the implementation of laws which deal with the provision of professional medical services to the public to seek and utilize the advice and assistance of the physician who will render such services. Such advice and assistance should be received through our chosen representatives, the officers of the American Medical Association.

"The American Medical Association intensify its efforts to modify all such pertinent legislation, employing the necessary means and appropriate actions to the end that the health of the public and the pursuit of excellence in medicine be unimpaired by such legislation.

"The American Medical Association make every effort to continue, and where necessary, to expand its communication activities so that all physicians as members of component medical societies will be promptly, continuously and completely informed of developments in this critical area during the coming months."

There was much discussion in regard to the DeBakey Commission Report and after reviewing 7 resolutions, the following policy was adopted by the House:

"The American Medical Association point with pride to the immense strides made in the approaches to the conquest of heart disease, cancer, and stroke under existing patterns of research and medical practice; strongly favoring the use of available financial support for extension of these patterns rather than replacement by a complex of medical control centers and satellites.

"The American Medical Association oppose those particular Commission recommendations which call for and have stimulated proposals for hastily contrived and unproven sweeping changes in the pattern of medical research, education, and patient care.

"The component state medical associations be urged to conduct conferences with medical educators and scientists, medical staffs of hospitals, medical society representatives, and other interested parties, for the purpose of exchanging information and for the development of such recommendations as may be appropriate for the continued improvement of medical education, research and patient care.

"The state medical associations be urged to report findings and recommendations resulting from these conferences to the AMA Board of Trustees, for the information of the Board, its councils, and the Association members."

In 1963 The Gundersen Committee was appointed to review the size, make-up, and function of the House of Delegates. The preliminary report from this committee was received. Action is to be taken at the December meeting in Philadelphia because some points of the report are unfinished.

In miscellaneous actions taken on 73 separate resolutions and many reports from councils, committees, Board of Trustees, and the House of Delegates, the high lights are included: The House

1. Urged medical schools and agencies concerned with continuing education to incorporate "appropriate learning experiences" for physicians in counseling relating to sexual attitudes and behavior.

2. Recommended that component medical societies be urged to encourage the establishment of cancer registries in the local hospital (though this was not made a requirement for accreditation by the Joint Commission on the Accreditation of Hospitals.)

3. Instructed the Council on Medical Service to remain alert to Veterans Administration policies and provisions on treatment of veterans by private physicians, especially with reference to prescriptions. Advised meeting with pharmacies in this area.

4. Reaffirmed policy concerning the practice of radiology, pathology, anesthesiology, and physical medicine in hospitals.

5. Reaffirmed the policy that human blood, as living tissue, should not be purchased under insurance contracts.

6. Urged state and local societies to encourage development of Explorer Scout program for Medical Specialty Posts.

7. Adopted a resolution calling for a continued effort to secure the passage of legislation which will remove tax discrimination against professional people.

8. Directed the Board to review the subject of federal assistance for operating expenses of health and medical education facilities.

9. Directed the Board to study opportunities and problems associated with Operation Head Start and other programs now operating under the Economic Opportunity Act.

10. Referred to the Council on Medical Education the resolution for approval of American Board of Family Practice.

11. Urged the Council on Medical Education to establish a standard date of appointment for all approved residency training programs.

12. Encouraged state and county medical societies in the formation of state Associations of Professions.

13. The Resolution introduced by the North Carolina Delegation for the formation of long-term planning and projects was referred to the Board of Trustees.

In addition to the election of Dr. Hudson, the following offices were filled at this meeting:

Dr. Irving E. Hendryson elected to the Board of Trustees; Dr. W. Andrew Bunten, Cheyenne, Wyoming, elected to Association's Vice Presidency; Dr. Milford O. Rouse and Dr. Walter C. Bornemeir re-elected Speaker and Vice Speaker of the House of Delegates: Dr. Bland W. Cannon elected to the Council on Medical Education; Dr. C. A. Hoffman of West Virginia and Dr. Russell B. Roth of Erie, Pennsylvania re-elected to the Council on Medical Service; Dr. George D. Johnson of Spartanburg, South Carolina re-elected to the Council on Constitution and Bylaws.

Elias Faison, M.D.
Amos N. Johnson, M.D.
Donald Koonce, M.D.
John R. Kernodle, M.D., *Secretary*

North Carolina Delegates to the American Medical Association

WHEN MOTHER'S IRON ISN'T UP TO MOTHERHOOD

IN BRIEF: ACTIONS AND USES: A single dose of Imferon (iron dextran injection) will measurably begin to raise hemoglobin and a complete course of therapy will effectively rebuild iron reserves. The drug is indicated only for specifically-diagnosed cases of iron deficiency anemia and then only when oral administration of iron is ineffective or impractical. Such iron deficiency anemia may include: patients in the last trimester of pregnancy; patients with gastrointestinal disease or those recovering from gastrointestinal surgery; patients with chronic bleeding with continual and extensive iron losses not rapidly replenishable with oral iron; patients intolerant of blood transfusion *as a source of iron;* infants with hypochromic anemia; patients who cannot be relied upon to take oral iron.

COMPOSITION: Imferon (iron dextran injection) is a well-tolerated solution of iron dextran complex providing an equivalent of 50 mg. of elemental iron in each cc. The solution contains 0.9% sodium chloride and has a pH of 5.2-6.0. The 10 cc. vial contains 0.5% phenol as a preservative.

ADMINISTRATION AND DOSAGE: Dosage, based upon body weight and Gm. Hb./100 cc. of blood, ranges from 0.5 cc. in infants to 5.0 cc. in adults, daily, every other day, or weekly. The total iron requirement for the individual patient is readily obtainable from the dosage chart in the package insert. Deep intramuscular injection in the upper outer quadrant of the buttock, using a Z-track technique, (with displacement of the skin laterally prior to injection), insures absorption and will help avoid staining of the skin. A 2-inch needle is recommended for the adult of average size.

SIDE EFFECTS: Local and systemic side effects are few. Staining of the skin may occur. Excessive dosage, beyond the calculated need, may cause hemosiderosis. Although allergic or anaphylactoid reactions are not common, occasional severe reactions have been observed, including three fatal reactions which may have been due to Imferon (iron dextran injection). Urticaria, arthralgia, lymphadenopathy, nausea, headache, and fever have occasionally been reported. Initial test doses of 0.5 cc. are advisable.

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CONTRAINDICATIONS: Imferon (iron dextran injection) is contraindicated in patients sensitive to iron dextran complex. Since its use is intended for the treatment of iron deficiency anemia only, it is contraindicated in other anemias.

CARCINOGENICITY POTENTIAL: Using relatively massive doses, Imferon (iron dextran injection) has been shown to produce sarcoma in rats, mice and rabbits and possibly in hamsters, but not in guinea pigs. The risk of carcinogenesis, if any in man, following recommended therapy with Imferon (iron dextran injection) appears to be extremely small.

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Bulletin Board

Coming Meetings

Ninth District Medical Society Meeting—Salisbury, August 29.

North and South Carolina Societies of Ophthalmology and Otolaryngology—Myrtle Beach, September 12-14.

Charlotte Postgraduate Seminar—Presbyterian Hospital Charlotte, September 29-30.

Fifth District Medical Society, Annual Meeting—Mid Pines Club, Southern Pines, October 8.

North Carolina Rural Health Conference—Memorial Auditorium, Raleigh, October 9.

North Carolina Family Life Council, Annual Conference—Queen Charlotte Hotel, Charlotte, October 10-12.

North Carolina Society for Crippled Children and Adults—King's Inn, Greensboro, October 15-16.

North Carolina Academy of General Practice, Annual Meeting—Jack Tar Hotel, Durham, October 31-November 2.

North Carolina Pediatrics Society, Annual Meeting—Mid Pines Club and Golfotel, Southern Pines, November 5-6.

AMA National Congress on Medical Ethics and Professionalism—Drake Hotel, Chicago, October 2-3.

American College of Surgeons, Clinical Congress—The Dennis and Shelburne Hotels, Atlantic City, October 18-22.

American Academy of Pediatrics, Annual Meeting—The Palmer House, Chicago, October 23-24.

New Members of the State Society

The following physicians joined the Medical Society of the State of North Carolina during the month of June, 1965:

Dr. Charles William Furlonge, 112 S. 5th Street, Box 36, Smithfield; and Dr. Robert Fletcher Mann, GP, Windsor.

Two-way Radio Medical Conferences

In the September 1964 issue of this Journal the Two-Way Radio Medical Conferences of the University of North Carolina School of Medicine were described. This fall these conferences enter their fifth year of service to physicians of this state and have proved to be a valuable adjunct to their post-graduate medical training.

Beginning in 1965 the geographic area of radio coverage will be increased. In addition to the University FM station (WUNC-FM), the following commercial stations have indicated their willingness to broadcast these programs: WVOT-FM (Wilson), WSJS (Winston-Salem), WITN-FM (Washington), WGWR-FM (Asheboro), and WLOS-FM (Asheville).

Those county medical societies or community hospital staffs within the area of radio coverage who desire to participate in these conferences are invited to make inquiry to Dr. Oscar L. Sapp, III, Director, Two-Way Radio Conferences, University of North Carolina School of Medicine, Chapel Hill, North Carolina.

News Notes from the Duke University Medical Center

Duke University was one of eight American universities to launch an effort on June 9 to put "electronic thinking machines" on the college campus.

Immediate objective of the new Interuniversity Communications Council is to form a national information network which will be available to all other colleges and universities.

Duke University Medical School Dean William G. Anlyan was named chairman of the INTERCOM's board of trustees and Dr. Harold Lewis, Duke University vice provost, was appointed council representative from Duke.

Announcement of the Council's organization was made on receipt of a $750,000 support grant from the Kellog Foundation. A primary objective is to "close the ever-widening gap between new scientific knowledge and its application."

* * *

Dr. Bernard Amos, professor of immunology, was one of nine specialists from leading medical centers to be named in June to a national organ transplant advisory body. Dr. Amos was appointed chairman.

The appointment was made by Dr. Luther L. Terry, U. S. Surgeon General.

Dr. Terry said that the committee would advise the National Institute of Allergy and Infectious Disease on research procedures in the immunology of organ transplantation.

At Duke Medical Center, Dr. Amos is co-principle investigator in a program whose aim it is to establish the first "living tissue bank" made up of volunteers willing to donate organs to victims of incurable disease. He is also associate professor of experimental surgery and director of the Duke Medical Center Immunogenetics Program.

* * *

Dr. Frank G. Hall and Dr. Duncan C. Hetherington will retire from the staff effective Aug. 31.

Dr. Hall is professor of physiology and pharmacology and director of the Duke Medical Center's Aero-Physiological Laboratory since 1926.

a rapid lift from the hell of depression



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IN BRIEF:

Indications: In depression of any kind—neurotic and psychotic depressive reactions; manic-depressive or involutional psychotic reactions.

Contraindications and Precautions: Glaucoma, urethral or ureteral spasm, recent myocardial infarction, severe coronary heart disease and epilepsy. Should not be given within two weeks of treatment with a monoamine oxidase inhibitor. Safety in human pregnancy has not been established.

Adverse Effects: Side effects, usually mild, may include: dry mouth, constipation, dizziness, palpitation, delayed urination, "bad taste," sensory illusion, tinnitus, agitation and stimulation, sweating, drowsiness, headache, orthostatic hypotension, flushing, nausea, cramps, weakness, blurred vision and mydriasis, rash, allergy, transient eosinophilia, granulopenia, altered liver function, ataxia and extrapyramidal signs.

Supplied: Norpramin (desipramine hydrochloride) tablets of 25 mg., in bottles of 50, 500 and 1000.

Dr. Hetherington is a professor of anatomy in the School of Medicine and has been a faculty member since 1930.

* * *

Four new medical training programs to be set up with the aid of a five-year $900,000 grant were announced on June 29 by Dr. Barnes Woodhall, vice provost for medical affairs.

One of the four programs will train "physicians' assistants." The new program will train high school graduates in a special two-year course that will enable them to take over, under supervision, many of the routine duties of doctors as well as some performed by nurses and technicians.

Other programs will train technicians, physicians and scientists in the use of hyperbaric oxygenation. The support grant was provided by the Department of Health, Education and Welfare.

* * *

Dr. Charles E. Mengel has been named to fill the first Charles Austin Doan Chair of Medicine at Ohio State University College of Medicine.

Dr. Mengel, 33, became associate professor of medicine and director of clinical service of hematology on July 1 at the Columbus institution.

The winner of a $30,000 Markle Scholarship in academic medicine in 1963, Dr. Mengel joined the Duke faculty in 1962 as an associate in medicine.

* * *

Dr. Edward S. Orgain has been named editor of Modern Concepts of Cardiovascular Disease, a monthly publication of the American Heart Association.

Dr. Orgain is a professor of internal medicine and director of the heart clinic at Duke. Dr. Orgain assumes the new post on Jan. 1, 1966.

* * *

Dr. J. Leonard Goldner has been named Visiting Professor of Orthopaedic Surgery at the Royal Children's Hospital, Melbourne, Australia.

En route to Australia Dr. Goldner will deliver addresses and participate in lectures in London, Copenhagen, Utrecht, Hong Kong and Tokyo. He returns to Duke on Sept. 7.

Dr. Goldner is chief of the amputee-orthopaedic clinic and professor of orthopaedic surgery at Duke Medical Center and is a former president of the North Carolina Orthopaedic Association.

News Notes from the Bowman Gray School of Medicine of Wake Forest College

Four assistant professors and three instructors were appointed to the faculty of the Bowman Gray School of Medicine July 1. They are Dr. Lawrence F. Conant, assisant professor of pediatrics (psychology); Dr. John W. C. Fox, assistant professor of anesthesiology; Dr. Leo J. Heaphy, Jr., assistant professor of medicine and associate in physiology; Dr. Nathaniel Silon, assistant professor of radiology; Dr. Elisabeth J. Fox, instructor in anesthesiology; Dr. Caryl Joy Guth, instructor in anesthesiology; and Dr. David L. Kelly, instructor in neurosurgery.

Dr. Conant, who for the past year has been director of research and development at the North Carolina Advancement School in Winston-Salem, will serve as psychologist in the medical school's program of research and treatment of mentally retarded children. A former director of a program at the University of the Pacific to train teachers for the mentally retarded, he holds the M.S., M.Ed., and Ph.D. degrees from the University of Oregon. He also has held faculty positions at the University of British Columbia and the University of Oregon.

Dr. Fox, a former fellow in anesthesiology at the Bowman Gray School of Medicine, has served as assistant professor of anesthesiology at Duke University Medical Center for the past two years. He holds an M.D. degree from the University of Lausanne, Switzerland, and took postdoctoral training in England at the Bedford General Hospital, Royal Sussex County Hospital, and the Brighton and Lewes Hospitals. He was registrar in anesthetics at the Eastbourne Group Hospitals and the Brighton and Lewes Hospitals from 1956 until 1960.

His wife, Dr. Elizabeth Fox, a former research associate and fellow in physiology at Bowman Gray, recently completed residency training in anesthesiology at Duke Medical Center. A native of Hardwicke, England, she holds the M.B. and B.S. degrees from King's College, University of London, and was graduated from King's College Medical School.

Dr. Heaphy, whose primary interests are in the field of pulmonary diseases, came to Bowman Gray from the Duke University School of Medicine where he was instructor in medicine and a National Institutes of Health Fellow in Pulmonary Disease. A native of Buffalo, N. Y., he received the M.D. degree from the University of Buffalo School of Medicine. He completed internship and residency training at E. J. Meyer Memorial Hospital, Buffalo, N. Y.

Dr. Silon, a native of Philadelphia, has served the past two years as instructor in radiotherapy and nuclear medicine at the University of Rochester Medical Center. He received the M.D. degree from Albany Medical College in 1958 and interned at Albert Einstein Medical Center in Philadelphia. Following a year of general practice in Long Island, N. Y., he took residency training in radiology at Meadowbrook Hospital, Long Island, N. Y.

Dr. Guth, who recently completed residency training in anesthesiology at the University of Pennsylvania Medical Center, will serve on the faculty for a six-month period. She will begin special studies in anesthesiology in England in

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January. A graduate of Wake Forest College and the Bowman Gray School of Medicine, she interned at the University of Kansas Medical Center.

Dr. Kelly, who holds the B.S. and M.D. degrees from the University of North Carolina, completed residency training in neurosurgery in June at North Carolina Baptist Hospital and the Bowman Gray School of Medicine. He also took postdoctoral training at Children's Hospital in Boston and at Washington University School of Medicine.

Recent appointments to the part-time faculty include Dr. Ignacio Bird, instructor in clinical radiology; Dr. Robert S. Brice, assistant in clinical medicine; Dr. Edward F. Doehne, assistant in clinical psychiatry; Dr. Albert O. Griffin, assistant in clinical medicine; and Dr. William S. Pearson, assistant in clinical psychiatry.

* * *

The Bowman Gray School of Medicine has been awarded a $28,350 grant by the National Foundation-March of Dimes to support the development of an ultrasound scanning system which could be used to diagnose numerous diseases.

Dr. Fredrick L. Thurstone, assistant professor and director of the medical school's Department of Biomedical Engineering, will direct the construction of the system which will utilize high-frequency sound to present physicians with two-dimensional pictures of the internal anatomy of the human body.

It will be designed to probe the organs and tissues deep within the body, all without pain or risk to the patient.

The system, a refinement of a prototype built recently by Dr. Thurstone, is expected to be completed by November. A comprehensive research program will then be initiated to determine the extent of the system's usefulness in diagnostic medicine. Dr. William M. McKinney, assistant professor of neurology, will supervise the clinical research program.

A refinement of the prototype, using a more accurate timing system and improved electronics, is expected to result in a highly effective diagnostic tool.

* * *

Forty-three residents and interns have joined the house staff of the North Carolina Baptist Hospital for advanced medical training.

The new appointments, which include 18 graduates of the Bowman Gray School of Medicine, brings the total of house officers at the medical center to 95. Appointments of two additional house officers will become effective in October.

* * *

Dr. Clark E. Vincent, professor of sociology at the Bowman Gray School of Medicine, has been named to a three-year term as associate editor of the Journal of Marriage and the Family. The journal is published quarterly by the National Council on Family Relations of which Dr. Vincent is president. He recently served as co-editor for a special issue of the journal, focused on "American Adolescents in the Mid-Sixties."

* * *

Dr. Richard C. Proctor, professor and chairman of the Department of Psychiatry, has been elected treasurer of the American College of Psychiatrists. A past president of the Southeastern Psychiatric Association and the Southern Psychiatric Association, he is currently secretary of the North Carolina Neuro-Psychiatric Association.

* * *

Dr. Frank R. Johnston, associate professor of surgery, received an honorary Doctor of Humanities degree from Presbyterian College during the school's June graduation ceremonies. A 1938 graduate of Presbyterian College, he joined the Bowman Gray faculty in 1950.

* * *

Dr. John A. Gergen, assistant professor of physiology, and Mrs. Ethel M. Nash, assistant professor of preventive medicine, spoke at the annual meeting of the Old North State Medical Society June 17 in Charlotte. Dr. Gergen discussed "Neurophysiological Basis of Sex." Mrs. Nash spoke on "Marriage Counseling and the Physician."

* * *

Dr. Frank R. Lock, professor and chairman of the Department of Obstetrics and Gynecology, was a panelist for a recent conference on "The Teaching of Biological and Medical Aspects of Reproduction to Medical Students." The conference, sponsored by the Josiah Macy Jr. Foundation, was held June 21-22 in Princeton, N. J.

* * *

Dr. George S. Malindzak Jr., assistant professor of physiology, participated in a recent program on the "Advances in Biomedical Computer Applications" at a meeting of the New York Academy of Science in New York City. He presented a paper on "Dynamics of Pressure Pulse Transmission in the Aorta."

* * *

John C. Hamrick Jr. of Shelby, a rising junior at the Bowman Gray School of Medicine, has been awarded a $600 scholarship by the Allergy Foundation of America to support two months of research and clinical training in the field of allergy.

The subject of his proposed research is "Possible Genetic Relationship of the Triad of Bronchial Asthma, Retarded Growth, and Elevated Gamma 1-A Globulins in a Male Child of 14 Years."

Hamrick, son of Dr. and Mrs. John C. Hamrick of Shelby, will conduct the work under the supervision of Dr. Carolyn C. Huntley, associate professor of pediatrics at the Bowman Gray School of Medicine.



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*Gold, H., *et al*: Closed Panel Conference: Present Status of the Management of Congestive Failure and Advances in Diuretic Therapy, Journal of New Drugs, 1:177, July-August, 1961.

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IN BRIEF: ADMINISTRATION AND DOSAGE: One 2 mg. or 4 mg. tablet once or twice daily. In acute, severe decompensation, Mercuhydrin® (meralluride injection) may be necessary initially.

PRECAUTIONS: As with all effective diuretics, vigorous therapy may produce electrolyte depletion. Patients with severely reduced renal function should be observed carefully since thiazides may be contraindicated. Care should be taken with patients predisposed to diabetes or gout. Patients with a tendency to potassium deficiency, as in hepatic cirrhosis or diarrheal syndromes, or those under therapy with digitalis, ACTH, or certain adrenal steroids, also should be watched carefully.

SIDE EFFECTS: Nausea, flushing, constipation, skin rash, muscle cramps and gastric discomfort have been occasionally noted; rarely thrombocytopenia and bone marrow depression, photosensitivity, cholestatic jaundice, pancreatitis, perimacular edema, gout and diabetes have been caused by administration of thiazides.

CONTRAINDICATIONS: Complete renal shutdown; rising azotemia or development of hyperkalemia or acidosis in severe renal disease; demonstrated hypersensitivity.

HOW SUPPLIED: Bottles of 100 and 1000 tablets.

News Notes from the University of North Carolina School of Medicine

A major reorganization of the University of North Carolina's top administrative structure, including the appointment of two Kenan professors to the new posts of vice chancellor, was announced recently by Chancellor Paul F. Sharp.

The plan—reshaping and centralizing channels of administrative authority to strengthen teaching and research, achieve greater unity of purpose and increased effectiveness—was necessitated by the University's rapid growth in recent years, the Chancellor said.

Named to new vice chancellorships are Dr. J. Carlyle Sitterson, Kenan professor of history and for the past 10 years dean of the General College and the College of Arts and Sciences, and Dr. Everett D. Palmatier, Kenan professor of physics and chairman of the Physics Department.

Dr. Sitterson became vice chancellor of the University on July 1. As such he assumed the duties and responsibilities of both the dean of the faculty and the administrator of the Division of Health Affairs. This step is designed to increase cooperation between the Division of Academic Affairs and Division of Health Affairs by placing both under a single top-level administrator.

Dr. Sitterson's staff will include an assistant vice chancellor for academic affairs and an assistant vice chancellor for health affairs.

Dr. Sitterson be responsible directly to Chancellor Sharp for programs and operations in both of these areas, which encompass all undergraduate academic programs and professional schools, including medicine, pharmacy, public health, dentistry, and nursing.

Dr. Palmatier will become vice chancellor for Advanced Studies and Research on September 1. The creation of this post consolidates responsibility for all graduates studies and research activities under one administrative official responsible directly to the Chancellor.

As vice chancellor, Dr. Palmatier will be assisted by the Dean of the Graduate School and a new Dean for Research Administration. Under the Dean of the Graduate School will be an associate dean for academic programs, an assistant dean for professional programs, and the director of graduate admissions.

* * *

Dr. George R. Holcomb has been appointed Dean of Research Administration at the University of North Carolina, effective July 1.

Dr. Holcomb will be responsible for all research and training grants and contracts and for foundation spending proposals. These grants will total about $14 million this year.

A U.N.C. faculty member since 1957, Dr. Holcomb has had teaching duties in the Department of Anatomy at the School of Medicine and in the Department of Sociology and Anthropology.

Since 1962, he has been associate dean of the Graduate School for Research Administration and since last December has served as coordinator for a proposed $2 million Child Development Center in Chapel Hill.

* * *

The federal government is satisfied now that racial discrimination does not exist at two units of UNC at Chapel Hill which have been targets of civil rights complaints.

Chancellor Paul F. Sharp announced recently that investigations of complaints against N. C. Memorial Hospital and the UNC School of Dentistry have established both as "in compliance with the nondiscrimination requirements of Title VI of the Civil Rights Act of 1964."

Results of the investigations were disclosed in a letter from James M. Quigley, assistant secretary of the U. S. Department of Health, Education and Welfare.

Mr. Quigley indicated in his letter to Chancellor Sharp that both units of the University have been cleared of the civil rights charges.

"In the case of the hospital," he said, "there have been recent affirmative steps which produced observable results on which to base a decision."

His reference was to the hospital's new policy of assigning all patients to rooms without regard to race, color, or national origin.

* * *

Courses which medical students take during their four years at the University of North Carolina School of Medicine will undergo their first major assessment beginning this summer.

The John and Mary R. Markle Foundation recently announced a $75,000 grant to be used with a $30,000 developmental and special purpose grant from the National Fund for Medical Education to finance a three-year study here.

Dean Isaac M. Taylor has appointed Dr. David R. Hawkins, professor of psychiatry, as director of the curriculum study and revision project, effective July 1.

* * *

Dr. Harold J. Fallon, an assistant professor of medicine at UNC, has been named a recipient of a Sinsheimer Fund Award valued at $50,000.

The Sinsheimer Fund Award was established in the will of Alexandria Sinsheimer to supplement the salaries of capable men engaged in teaching and research. It provides $10,000 each year for a period of five years.

Dr. Fallon is a native of New York and a medical graduate of the Yale University Medical School. He completed his advanced medical training at N. C. Memorial Hospital and joined the U. N. C. medical school faculty as an instructor in 1961.

His major research interests are liver diseases and genetics.



(mepenzolate bromide)

helps restore normal motility and tone

Cantil (mepenzolate bromide) works in the colon. In irritable colon, spastic colon, ulcerative colitis and other functional and organic colonic disorders, it acts to:

- control diarrhea/constipation
- relieve spasm, cramping, bloating
- make patients more comfortable

with little effect on stomach, bladder or other viscera.

"In 40 of 44 cases of irritable or spastic colon, Cantil [mepenzolate bromide] or Cantil with Phenobarbital reduced or abolished abdominal pain, diarrhea and distention and promoted restoration of normal bowel function . . . Cantil [mepenzolate bromide] proved to be singularly free of anticholinergic side-effects. Blurring of vision or dryness of the mouth were occasionally seen and were usually managed with a reduction in dosage. Urinary retention, noted in two cases was eliminated in one by reducing dosage."[1]

IN BRIEF:

One or two tablets three times a day and one or two at bedtime usually provide prompt relief. Cantil with Phenobarbital may be prescribed if sedation is required.

Dryness of the mouth or blurring of vision may occur but it is usually mild and transitory. Urinary retention is rare. Caution should be observed in prostatic hypertrophy—withhold in glaucoma. Cantil with Phenobarbital is contraindicated in patients sensitive to phenobarbital.

Supplied: CANTIL (mepenzolate bromide)—25 mg. per scored tablet. Bottles of 100 and 250.

CANTIL with PHENOBARBITAL—containing in each scored tablet 16 mg. phenobarbital (warning: may be habit forming) and 25 mg. mepenzolate bromide. Bottles of 100 and 250.

1-Riese, J.A.: Amer. J. Gastroent. 28:541 (Nov.) 1957

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The National Institute of Mental Health has approved three research career development awards totaling about $55,680 at the University of North Carolina Psychiatric Center here.

All of the awards are to psychiatrists to continue research projects already underway.

Dr. Arthur J. Prange will receive a one-year grant of $16,700 to continue his study of an exclusively human illness—mental depression.

Dr. Morris A. Lipton is the principal investigator for a continuing study of the biological approaches to psychopathology. He was awarded $22,000 for the next year.

Dr. Martin H. Keeler will continue his work on retinal phenomena and psychotominetic drugs. The amount of his award is $17,000.

* * *

A rising senior medical student at the University of North Carolina has been awarded a Foreign Fellowship by the Association of American Medical Colleges to spend at least 10 weeks this summer in a mission hospital in an underdeveloped country.

Howard Thomas Hinshaw of Greensboro, a rising senior at the UNC School of Medicine, will be assigned to the Friends Hospital in Tiriki, Kenya, British East Africa. He is one of 28 U. S. medical students selected for the fellowships made possible by a grant from Smith Kline & French Laboratories, Philadelphia pharmaceutical firm.

* * *

The 1965 medical graduates of the University of North Carolina will fan out later this month into 18 states, the District of Columbia and Canada for their required year of internship training.

They will become "house officers" in 27 hospitals spanning the continent from Florida and Montreal to California and Washington.

One of every four will remain in North Carolina hospitals. Six of the 63 new physicians will enter the military services.

Appointments were made through the National Intern Matching Program, a system under which medical students express preferences for hospitals and hospitals indicate preferences for medical students.

North Carolina Department of Mental Health

John Umstead Hospital at Butner has been awarded two five-year grants totaling $227,500 by the National Institute of Mental Health, according to an announcement by Dr. N. P. Zarzar, superintendent of the hospital.

The awards provide funds for establishing a three-year psychiatric residency training program at the hospital and for training physicians who have been in practice at least four years and wish to specialize in psychiatry at John Umstead Hospital.

According to Dr. Zarzar, the new program will provide training for residents in all phases of psychiatry with special emphasis on community psychiatry.

Development of the program is another step by the State Department of Mental Health to expand training and research programs in an effort to improve patient care and services.

The grants became effective July 1.

North Carolina Family Life Council

"Focus for Action: Education for Family Living" will be the theme of the 18th annual conference of the North Carolina Family Life Council to be held at the Queen Charlotte Hotel in Charlotte, October 10-12, 1965.

Participating in the three-day program will be a number of nationally known leaders in the field of family relations as well as stimulating professional and lay leaders in many fields of endeavor related to family life from throughout North Carolina.

A luncheon featuring the theme, "The NCFLC Looks Ahead," will conclude the meeting with reports from working groups and an address by Dr. Clark E. Vincent of the faculty of the Bowman Gray School of Medicine and president of the National Conference on Family Relations.

Registration fees are as follows: individual adults, $3.00; husband and wife, $3.00; students, 50 cents. All interested persons are welcome to attend.

North Carolina Obstetrical and Gynecological Society

The next meeting of the North Carolina Obstetrical and Gynecological Society will be held at Mid Pines Club, Southern Pines, April 22-24, 1966.

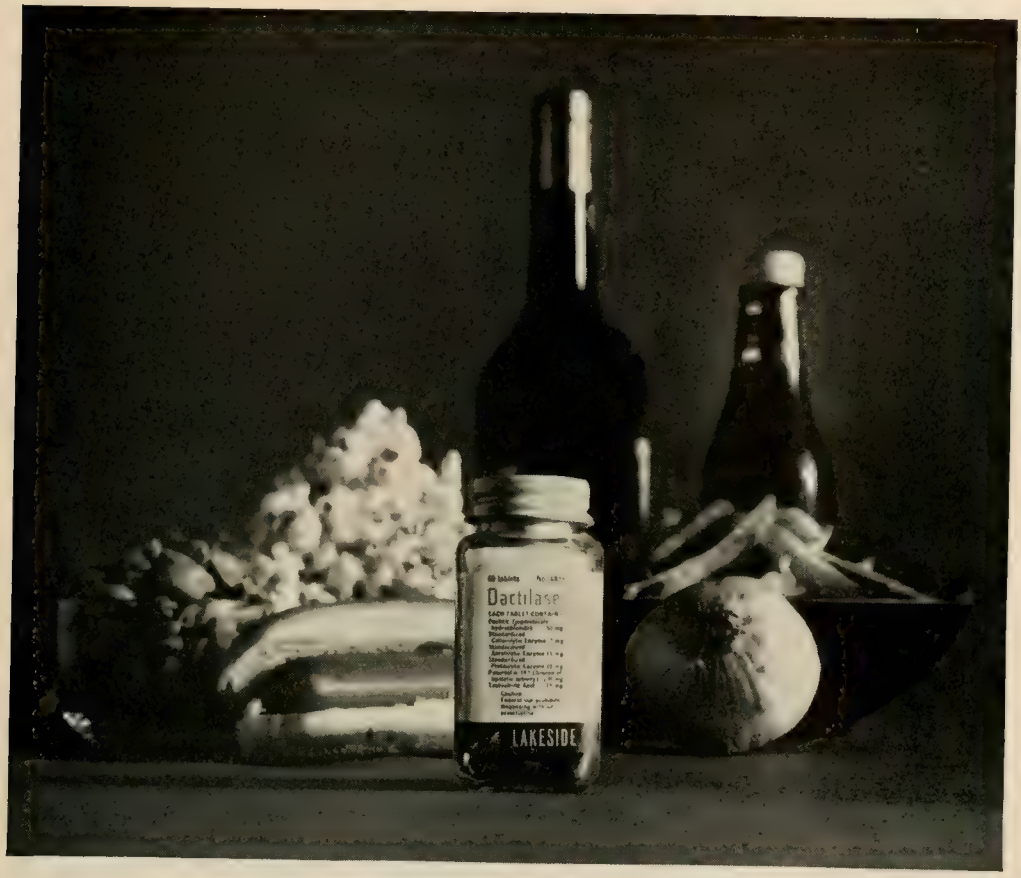
Officers for 1965-1966 are: president—Dr. O. Hunter Jones, Charotte; president-elect—Dr. William A. Peters, Jr., Elizabeth City; secretary-treasurer—Dr. Sam L. Parker, Jr., Kinston; program chairman—Dr. John R. Ashe, Jr., Concord.

News Notes from the North Carolina Heart Association

The American and North Carolina Heart Associations announce heart research fellowships and grants-in-aid totalling $236,557 to 40 scientists at four North Carolina institutions.

In the 16 years since the state and national heart groups made their first grants, a total of nearly $110-million raised by Heart Fund campaigns has been channeled into research, includ-

(Continued on page 372)



more complete relief for the "dyspeptic"

DACTILASE®

Dactilase provides comprehensive therapy for a wide range of digestive disorders. Its antispasmodic and anesthetic actions rapidly relieve pain and spasm. Dactilase decreases hypermotility without inducing stasis. In addition, it supplies digestive enzymes to help reduce bloating, belching and flatulence. Dactilase does not interfere with normal digestive secretions. Very often it can be a most useful answer to the dyspeptic's needs.

DACTILASE: Each tablet contains: Dactil® (piperidolate hydrochloride), 50 mg.; Standardized cellulolytic* enzyme, 2 mg.; Standardized amylolytic enzyme, 15 mg.; Standardized proteolytic enzyme, 10 mg.; Pancreatin 3X** (source of lipolytic activity), 100 mg.; Taurocholic acid, 15 mg.

*Need in human nutrition not established. **As acid resistant granules equivalent in activity to 300 mg. Pancreatin N.F.

Side Effects and Contraindications: DACTILASE is almost entirely free of side effects. However, it should be withheld in glaucoma and in jaundice due to complete biliary obstruction.

Administration and Dosage: One tablet with, or immediately following each meal. Tablets should be swallowed whole.

Supplied: Bottles of 60 and 250.

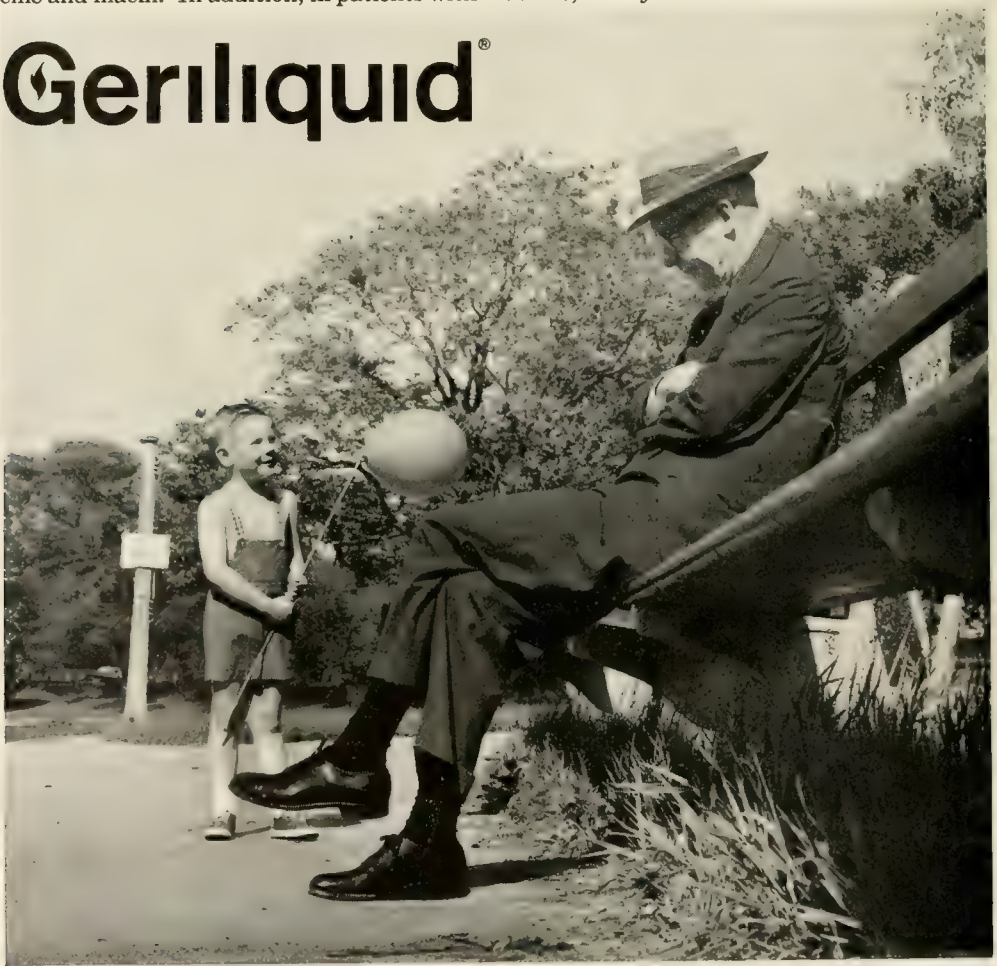
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provide rapid, sustained vasodilation for warmth and relief of pain, dizziness and faintness in patients with impaired peripheral circulation

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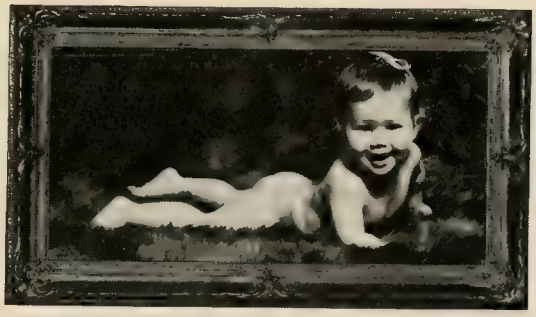


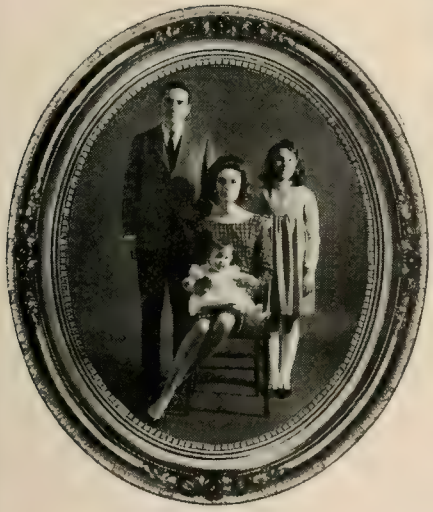
IN BRIEF: Composition: Each 5 ml. contains: niacin 75 mg. and aminoacetic acid (glycine) 750 mg. in a palatable sherry wine base; alcohol 5%.
Side Effects: Occasional lightheadedness or transient itching which may disappear with continued use. There are no known contraindications; however, caution is advised when there is concomitant administration of a coronary vasodilator.
Administration and Dosage: One or two teaspoonfuls 3 times a day before meals. If flushing is objectionable, dosage may be lowered. However, tolerance to flushing usually develops without loss of efficacy in regard to vasodilation.
Supplied: Bottles of 8 oz. and 16 oz.

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Pleasant tasting Pediatric Piptal with Phenobarbital is miscible in milk, formulas and fruit juices, and may also be administered by dropper directly on the infant's tongue. Dosage is 0.5 cc. 15 minutes before feeding; in severe cases, 1.0 cc. four times daily. High doses may occasionally cause constipation with tenesmus and, rarely, flushing without fever. Contraindicated in bowel obstruction or sensitivity to phenobarbital or anticholinergics. Available in 30 cc. dropper bottles, droppers calibrated to deliver 0.5 cc.

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ing $2,468,319 to investigators at North Carolina heart research centers.

The American Heart Association and its affiliates are underwriting a $10-million research effort for the fiscal year 1965-66, according to Dr. Daniel T. Young, president of the North Carolina Heart Association. Dr. Young pointed out that the allocations make the Heart Fund the largest non-governmental source of cardiovascular research support in the world.

Recipients of the newly announced awards are located at the Bowman School of Medicine, Winston-Salem; the University of North Carolina School of Medicine, Chapel Hill; Appalachian State Teachers College, Boone.

* * *

Robert L. Davis, of Chapel Hill, program director of the **North** Carolina Heart Association, has been named executive director of the **South** Carolina Heart Association, effective July 1.

Before joining the staff of the North Carolina heart group in 1956, Davis was field director of the N. C. Society of Crippled Children and Adults. As NCHA program director, he has been responsible for the development and coordination of medical and non-medical cardiovascular disease control programs in local communities in North Carolina.

* * *

The North Carolina Heart Association has announced the formation of the Cape Fear Region, composed of local Heart Associations in Bladen, Brunswick, Columbus, Duplin, Jones, Pender, and Sampson counties.

According to Mrs. George Rountree, Jr., of Wilmington, NCHA field consultant, the new multicounty region is the seventh in a statewide administrative reorganization begun last year by the state heart group. Other regions include the Pamlico and Tidewater Region in the eastern part of the state; the Sandhills Region in the Piedmont; and the Blue Ridge, Nantahala, and Pisgah Regions in Western North Carolina.

First National Congress on Medical Ethics and Professionalism

The American Medical Association is sponsoring a National Congress on Ethics and Professionalism at the Drake Hotel in Chicago on October 2 and 3, 1965.

Any physician interested in attending this meeting should write to James H. Berge, M.D., chairman, Judicial Council, American Medical Association, 535 North Dearborn Street, Chicago, Illinois 60610, for detailed information.

Since accommodations at the Drake are limited, reservations will be accepted on a first-come first-served basis.

Dr. George W. Paschal, president of the Medical Society of the State of North Carolina, has designated the following three official delegates to represent the Society at the congress: Dr. T. S. Raiford of Asheville, Dr. Alfred T. Hamilton of Raleigh, and Dr. Kenneth Weeks of Rocky Mount.

AMA president, Dr. James Z. Appel, and Former Congressman Walter H. Judd, M.D., will be among the featured speakers.

American College of Physicians

The third Fall Meeting of the American College of Physicians (ACP) will be held October 7-9 at the Deauville Hotel in Miami Beach, Fla.

The meeting will be open to members, students, interns, and residents without charge and to non-member physicians upon payment of a $25 registration fee.

Following its practice of placing emphasis on the scientific program at fall meetings the ACP will hold no business sessions and will limit social functions to a reception Thursday evening, October 7, and a luncheon on Friday, October 8. The meeting adjourns at noon on October 9.

Information on the meeting can be obtained from Edward C. Rosenow, Jr., M.D., Executive Director, American College of Physicians, 4200 Pine Street, Philadelphia, Pa., 19104.

American Association of Medical Assistants

Doctor, would you like **your** medical assistant to know more about: Using available communications equipment? Work simplification? The mechanics of and reasons for following patients throughout their health needs? Working with a medical management consultant to obtain the best results for you?

Then send her to the annual meeting of the American Association of Medical Assistants, October 13-17 in New York. All these topics, plus other phases of office management, will be discussed during the two-day educational seminar planned for the meeting at the Roosevelt Hotel.

Prior to the formal opening of the meeting, special tours and events have been arranged for the medical assistants, including visits to the World's Fair" and the UN.

On Friday, October 15, AMA President James Z. Appel, M.D., Lancaster, Pa., will be the guest speaker at a luncheon honoring AAMA past presidents.

U. S. Department of Health, Education, and Welfare

National Institutes of Health

The cooperation of physicians is requested in a study of Hodgkin's disease and lymphosarcoma being conducted by the National Cancer Insti-



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PIPTAL® (pipenzolate bromide) efficiently suppresses acid secretion and motility ... relieves pain and spasm of peptic ulcer. Despite its potent gastrointestinal effects, "its clinically effective therapeutic dose is well below that required to produce side reactions."[1] Because urinary retention is rarely a problem, PIPTAL (pipenzolate bromide) is "a highly desirable drug in the treatment of peptic ulcer in older patients ..."[2] Tolerance to PIPTAL (pipenzolate bromide) has not been demonstrated, and the drug may be administered over prolonged periods without loss of efficacy. *PIPTAL-PHB is specifically designed for the tense ulcer patient who will benefit from the sedative effect of phenobarbital.*

1—Pomeranze, J., and Gadek, R.J.: Am. Pract. & Digest Treat. 8:73-77 (Jan.) 1957

2—Asher, L.M.: Am. J. Digestive Diseases 4:272 (Apr.) 1959

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(phenobarbital, 16 mg., pipenzolate bromide, 5 mg.)

IN BRIEF: PIPTAL—Each tablet contains 5 mg. pipenzolate bromide, PIPTAL-PHB—Each tablet (or 5 cc. of elixir) contains phenobarbital (warning: may be habit forming) 16.0 mg., Piptal (pipenzolate bromide) 5 mg. The elixir contains alcohol 20%.

Side Effects: Dry mouth, blurring of vision or drowsiness may occur.

Contraindications: Withhold in glaucoma, bladder or g.i. obstruction, cardiac arrhythmias and in sensitivity to anticholinergics or phenobarbital (Piptal-PHB). Caution should be observed in patients with prostatic hypertrophy.

Administration and Dosage: PIPTAL or PIPTAL-PHB Tablets: One tablet three times a day before meals and one or two tablets at bedtime. (PIPTAL-PHB Elixir: One teaspoonful three or four times daily for adults and children over six years of age.)

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tute at the Clinical Center, National Institutes of Health, Bethesda, Maryland.

Particularly desired are patients who have had no previous treatment or minimal prior treatment. All clinical stages of biopsy-proven disease are acceptable. The major purpose of the study is to determine the curative potential of intensive radiotherapy in localized cases and to evaluate combination chemotherapy and X-irradiation in patients with generalized involvement.

Physicians interested in having their patients considered for the study may phone or write to:

Paul P. Carbone, M.D., The Clinical Center, National Institutes of Health, Building 10—Room 12N-228, Bethesda, Maryland 200014.

* * *

The cooperation of physicians is requested in a clinical study of liver disease of uncertain etiology being conducted by the Metabolism Service of the National Cancer Institute at the Clinical Center, National Institutes of Health, Bethesda, Maryland.

Of interest for this study are patients with liver disease of uncertain etiology who would require, in the opinion of the referring physician, a liver biopsy as well as other studies to help establish the specific diagnosis. Those patients with long-standing hyperbilirubinemia or abnormal serum enzyme levels (SGOT, etc.) would be of particular interest.

Patients who are accepted for this study will be admitted to the Clinical Center for approximately two weeks and should anticipate having a liver biopsy performed.

Physicians interested in having their patients considered for the study may write or telephone:

Matthew Menken, M.D., Clinical Center, Room 4-N-117, National Institutes of Health, Bethesda, Maryland 20014.

Pharmaceutical Manufacturers Association

The Wholesale Price List Index for Ethical Pharmaceuticals has declined for the sixth straight year.

The index fell during 1964 from a level of 86.2 to an all-time low of 86.0 (1949 equals 100.00). This index, which measures price changes annually, has been prepared by Dr. John M. Firestone, of the City College of the City of New York.

Dr. Austin Smith, President of the Pharmacenutical Manufacturers Association (PMA), said the drop in the index parallels that in the U. S. Bureau of Labor Statistics Wholesale Price Index for "Ethical Pharmaceutical Preparations" since its revision in 1961. The Government Index declined from 100.0 in December 1960, to 94.8 last December, while the industry index declined from 92.4 to 86.0.

Dr. Smith said, "The significance of this index to the public is that wholesale drug price trends are exceedingly favorable when viewed against the price records for all commodities in recent years. While all wholesale prices have risen more than 20%, wholesale drug prices have declined 14%.

American College of Gastroenterology

Dr. Samuel Weiss of New York City, who has been editor-in-chief of the **American Journal of Gastroenterology** since he was instrumental in its founding in 1934, will retire with the appearance of the April, 1965 issue and become editor emeritus.

Dr. Weiss has been in active practice since 1907 and is emeritus professor of gastroenterology at the New York Policlinic Medical School and Hospital and is on the consultant staff of various other institutions.

The new editor-in-chief, appointed by the Board of Trustees of the American College of Gastroenterology, will be Dr. Milton J. Matzner of Brooklyn, New York who will assume the position with the publication of the May, 1965, issue. This issue, it was announced by Dr. Matzner, will be a special issue dedicated to the retiring editor, Dr. Samuel Weiss on the occasion of his 80th birthday that month and as a tribute to more than 30 years of devoted service to the publication and the college.

Classified Advertisments

Staff Physician—for position in established Medical Dept. of large Piedmont North Carolina industry. Liberal benefits, salary commensurate with experience and qualifications. Write full personal details and availability. An equal opportunity employer. Reply in care of the Journal, P. O. Box 790.

For Lease or Sale: Office space, Medical Village Inc., Burlington, N. C. Dr. J. W. Lynn, Jr.

Physician Wanted: Physician interested in general practice; excellent opportunity. Piedmont section. Vacating office for residency. If interested please contact Post Office Box 11438 Charlotte, North Carolina.

Needed — general physician — family internship by four-man group in growing rural program in West Virginia. Modern clinic facilities, regular visiting specialist consultant staff, scheduled training and vacation periods, foundation sponsorship, no investment required. Starting net income range $14,000 through $18,000 depending on qualifications. Reply in care of the Journal, P. O. Box 790, Raleigh, N. C.

For Sale: Fischer 75 MA X-ray-Fluoroscopy Unit and all accessories. Fischer Diathermy Burdick EK2 Electrocardiograph. C. T. Harris, Jr., M.D., 425 Roberts Street, Salisbury, N. C.

Book Reviews

Health Objectives for the Developing Society—Responsibility of Individual, Physician, and Community. Edited by E. Croft Long. Price, $3.50. Durham: Duke University Press, 1965.

This book is composed of papers presented at Duke University in September, 1963. The purpose of the seminar was to exchange ideas on the status and objectives of rural health for a developing society.

Health problems of rural communities from Canada to the Southeastern United States to Brazil are fully and ably presented. While there are single papers devoted to the roles of the individual, the physician, and the community in rural health, there are frequent allusions to these topics in other papers.

The chief difficulty in the improvement of rural health lies in the fact that the community is not urbanized. Scattered villages and the lack of a central large aggregation of people present difficulties in the provision of sanitation and medical facilities accepted as necessary in urban populations. The present-day training of physicians in any country does not prepare him for work in rural areas of his own country. Health personnel needed for rural health is inadequate in both number and training.

In "newly-developing areas" the specific rural-health problems are related to nutrition, control of infectious and parasitic diseases, and first aid for accidental trauma. In the slightly more advanced or "developing" areas the problems are related to unavailability of modern medical care according to urban standards, failure to provide health care for migrant workers, and lack of safety education regarding the use of complex farm machinery and the long hours of work.

The only chapter which is difficult to read is that on the role of the community. The ideas presented are obscured by overuse of phrases such as "technical consciousness of the public," "disability burden of a population," and "the provision of health care embodies the character of ultimate consumption from the point of view of the people serviced at the same time that it can be used to promote and facilitate the achievement of the larger goals of a society."

This is a most interesting book which fails to answer the questions but perhaps poses the problems in a clearer manner, and points out the need for a non-urbanized approach.

Tar Heel battle deaths during the Civil War roughly equalled a single year's cardiovascular toll in this state, says the North Carolina Heart Association.

The Month in Washington

The Public Health Services Advisory Committee on Immunization Practices has predicted increased amounts of influenza in the coming season (1965-1966).

The committee again recommended immunization for persons in groups who experience high mortality from epidemic influenza. Vaccination, the committee said, should begin about Sept. 1, and ideally be completed by mid-December.

"It is important that immunization be carried out before influenza occurs in the immediate area, since there is a two-week interval before the development of antibodies," the committee said.

Groups for which annual immunization were recommended:

"(a) Persons at all ages who suffer from chronic debilitating disease, e.g., chronic and cardiovascular, pulmonary, renal or metabolic disorders; in particular:

"1. Patients with rheumatic heart disease, especially those with mitral stenosis.

"2. Patients with other cardiovascular disorders such as arteriosclerotic heart disease and hypertension, especially those with evidence of frank or incipient cardiac insufficiency.

"3. Patients with chronic bronchopulmonary disease, for example, chronic asthma, chronic bronchitis, bronchiectasis, pulmonary fibrosis, pulmonary emphysema, pulmonary tuberculosis.

"4. Patients with diabetes mellitus and Addison's disease.

"(b) Persons in older age groups.

"(c) Pregnant women.

"(d) Patients residing in Nursing Homes, Chronic Disease Hospitals, and other such environments should be considered as particular risks since their more crowded living arrangements may allow for greater spread of disease once an outbreak has been established."

The committee reported that there were cases of influenza in a majority of the states in the eastern two-thirds of the country during last season (1964-1965) but that the amount of the disease in the United States as a whole was limited. There was no major epidemic anywhere in the country and most states in the far west were unaffected.

The committee said that Type A influenza

viruses may predominate in 1965-1966 but that Type B outbreaks also could be expected.

As to vaccine efficacy, the committee said:

"Influenza vaccine has consistently shown a substantial protective value when the viruses incorporated in the vaccine were antingenically similar to those causing the epidemic disease. Exceptions to the vaccines' apparent effectiveness have occurred in instances when the prevalent virus underwent a major antigenic shift after vaccines had been formulated. Careful study goes into the annual design and updating of the composition of influenza vaccines. The final selection of components reflects the best judgment regarding a potent, contemporary vaccine.

"That influenza vaccine prevents mortality from influenza, particularly among the aged and chronically ill, is based upon inference. It is presumed that vaccine protection demonstrated in studies among younger persons is similar among the aged and chronically ill, the group at particular risk of death should they acquire the disease. It is further assumed that such protection against clinical disease serves to protect them also against mortality associated with epidemic influenza.

* * *

Congress has approved legislation imposing stiff Federal controls on the manufacture and sale of amphetamine and barbiturate tablets.

The American Medical Association supported the legislation which was aimed at curtailing use of the drugs as "pep pills" and "goof balls."

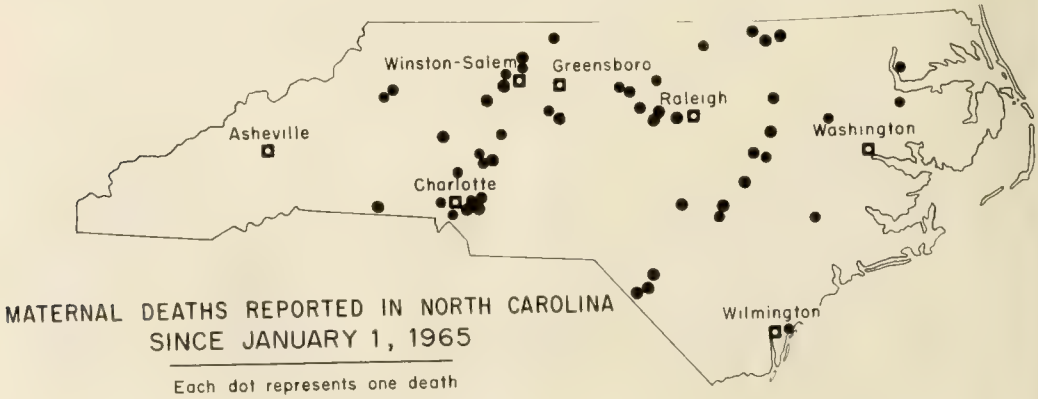
In requesting the legislation, Food and Drug Administration Commissioner George P. Larrick told Congess that half of the nine billion amphetamines and barbiturates manufactured annually have been sold on the black market to teen-agers, truck drivers and persons searching for a substitute for marijuana, heroin, or cocaine.

The version of the legislation as finally approved left it up to the Secretary of Health, Education and Welfare whether he utilizes an advisory committee before deciding whether depressant or stimulant drugs have a bad effect on a person's personality. The AMA had recommended that this provision be mandatory.

The new law also requires detailed bookkeeping on the drugs by manufacturers and wholesalers. Druggists' sales records of the pills must be open for inspection by FDA agents. This provision aimed at keeping track of the retail distribution of the prescription drug.

The record-keeping and inspection provisions will not apply to licensed physicians with respect to drugs received and used in the course of their practice, unless the practitioner regularly engages in dispensing the drug to his patients for which they are charged, either separately or together with charges for other professional services.

In its reports, the House and Senate committees stated that the legislation was intended "to require record-keeping and to permit inspection in the case of those physicians who maintain a supply of pharmaceuticals or medicinals in their offices from which they compound prescriptions for their patients for a fee." The House committee report contained identical language.

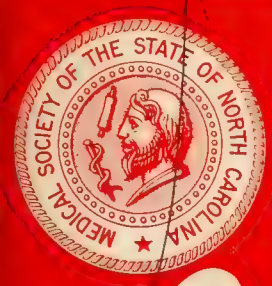


MATERNAL DEATHS REPORTED IN NORTH CAROLINA SINCE JANUARY 1, 1965

Each dot represents one death

NORTH CAROLINA

September, 1965
Vol. 26 No. 9



MEDICAL JOURNAL

PUBLISHED MONTHLY BY THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA

IN THIS ISSUE:

Renal Transplantation—First North Carolina Case

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Table of Contents, Page II

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Renal Transplantation With Donor-Recipient Tissue-Matching

Preliminary Report of First Case in North Carolina

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DURHAM

Recent renal transplantations have been encouraging in many respects; nevertheless, a number of unsolved problems remain, notably the immunologic rejection of transplanted tissue not genetically identical to that of the recipient. As part of a comprehensive approach to this problem, a tissue-matching program for renal transplant patients was inaugurated recently at Duke University Medical Center. Its need is evident from the following brief review, which is followed by a preliminary report of the first case of renal transplantation in North Carolina.

Present Status of Clinical Transplantation

More than 600 renal transplant procedures have now been performed, largely during the last ten years and in a number of centers in the United States and Europe. Recently Starzl[1] reported that of 64 patients who had received a graft from a living donor other than an identical twin, 37 were alive and manifesting good renal function one year postoperatively. Comparable results have been reported by others, notably Hume[2] and Murray[3]. Nevertheless, longer follow-up will be necessary before the present clinical status of renal transplantation can be assessed fully. Such information is limited at present because about half of all kidney transplants have been performed within the last three years. That a few patients have survived for two, three, four,

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and five years indicates that prolonged survival may be expected in many of the patients who have passed the one-year mark. Furthermore, survival for one year is in itself significant, because renal transplants from unrelated donors generally cease to function within 8 to 21 days without the aid of immunosuppressive drugs or radiation therapy. Since complete compatibility probably does not occur except between identical twins, renal allograft* survival for as long as one year is thought to require both a considerable degree of tissue compatibility between the donor and recipient, and effective suppression of the recipient's immune response to relatively weak tissue antigens in the graft.

The majority of human kidney transplant procedures have failed because of either immunologic rejection of the graft or toxic side-effects from agents which have been used to suppress this response[4]. For the most part, ionizing irradiation and immunosuppressive drugs have been used, and have

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*John and Mary R. Markle Scholar in Academic Medicine.

*The new term "allograft" is synomous with "homograft": a graft from any donor other than an identical twin.

proved remarkably effective. They not only have inhibited and delayed the rejection process, but have often reversed the signs of rejection which have appeared. In many patients, however, the graft has been rejected eventually despite the use of toxic doses of immunosuppressive agents. For this reason, these agents have fallen short of providing a completely satisfactory answer to the problem of immunologic rejection of foreign tissues.

The importance of the genetic relationship between donor and recipient is evident from the experience with renal transplants from genetically related donors. Twenty-four of 27 patients who had received a graft from an identical twin were alive and enjoying good kidney function one year after operation, and the results were almost as good for longer periods of follow-up[4]. One of the early patients was reported to be well eight years after transplantation[5]. Similarly, though to a less striking degree, the rate of prolonged survival is substantially higher among recipients whose graft was obtained from a close relative than among those whose donor was unrelated. In Starzl's experience with living donors, one-year survival was the case in 31 of 46 recipients (67%) of transplants from consanguine donors (exclusive of identical twins), and in 6 of 18 recipients of grafts from unrelated donors.

The strong, *i.e.*, more clinically important, tissue antigens in human kidney may not prove to be great—probably less than ten and perhaps less than four[6]. Heretofore, donor selection has been carried out largely without attention to these antigens because methods of tissue typing and matching have not been available. Available typing methods are still complex and developmental, and there is no actual information regarding their effectiveness in donor selection. However, in one retrospective study of long-term survivors of renal transplants, it would appear that the matching technique used (a serologic method somewhat comparable to the cytotoxicity method noted below) may be effective in evaluating donor-recipient compatibility[1]. The selection of perfectly compatible donors by typing and matching methods probably lies in the distant future, and indeed may not be necessary with the availability of effective immunosuppressive agents. The present objective of donor-recipient matching is to select donors who exhibit a considerable *degree* of compatibility for any given recipient, thereby avoiding the combinations that are responsible for the high incidence of graft rejection during the first year following surgery.

Antigens of leukocytes and skin are the ones usually tested in currently used matching methods. The validity of this approach is supported by considerable evidence that both leukocytes and skin contain nearly all of the transplantation antigens present in other tissues. Information is becoming available on seven or more antigenic systems of leukocytes, four having already been described[7, 8] and at least three more to be reported in the proceedings of the forthcoming Leiden Conference[9]. The theoretical and practical aspects of histocompatibility testing are discussed in a recent book[10], and the biologic problems of transplantation in general are treated comprehensively in two recent reviews[5, 11].

Case Report

A 36 year old mirror factory worker was admitted to the Durham Veterans Administration Hospital on Dec. 10, 1964, with a chief complaint of "high blood pressure and kidney trouble." His present illness began during military service with the discovery of proteinuria on routine urinalysis in 1953. Left frontal headaches began in 1956, when his personal physician told him that his blood pressure was 200 mm Hg. The headaches became more frequent during the summer of 1964, mild anemia was observed in September, and generalized pruritus and some blurring of vision developed in November.

He continued to work until Nov. 22, 1964, when he experienced nausea, vomiting, dysuria, oliguria, and three generalized convulsions. He was admitted to another hospital where his blood pressure was 260/150 mm Hg, associated with grade 2 retinopathy. Laboratory tests revealed a blood urea nitrogen (BUN) level of 108 mg/100 ml; creatinine clearance, 10.2 ml/minute; microscopic hematuria; some red cell casts; and urinary protein excretion, 6.3 gm/24 hours. Although his blood pressure was controlled with parenteral administration of reserpine and oral doses of guanethidine, the BUN level gradually rose to

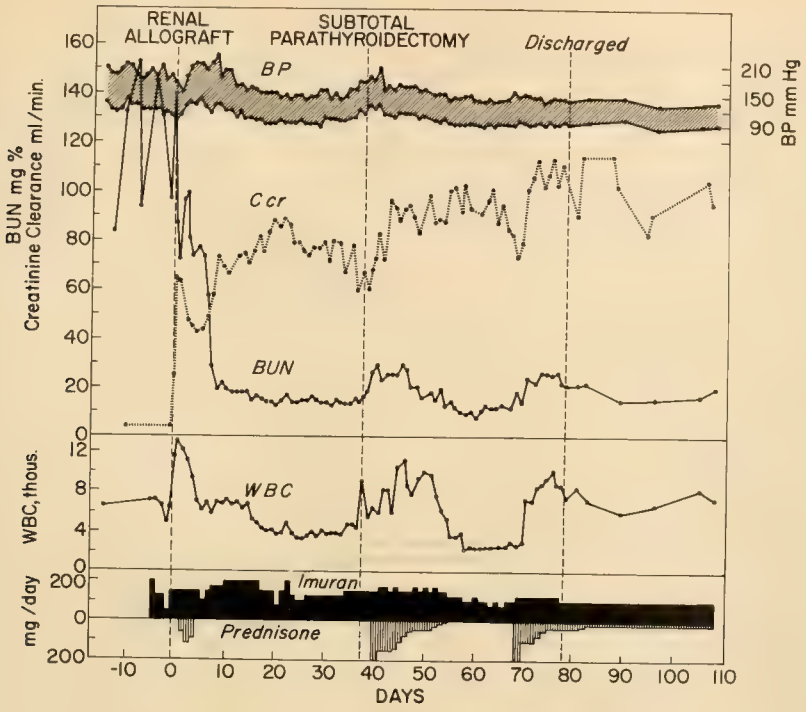


Figure 1

192 mg/100 ml. Peritoneal dialysis was instituted, the patient showed symptomatic improvement, and he was discharged from the hospital. Continuing complaints of moderate exertional dyspnea and easy fatiguability prompted his admission to the VA Hospital five days later.

Physical examination

Physical examination on admission revealed a chronically ill white man in no acute distress. The vital signs were normal except for a supine blood pressure of 180/100 mg Hg. Funduscopic examination revealed bilateral retinal hemorrhages, arteriolar narrowing, and arterioventricular nicking. The remainder of the examination was within normal limits.

Accessory clinical findings

Laboratory studies revealed the following values: Hematocrit 23%, white blood cell count 10,450 with a shift to the left; urinary pH 5.0, specific gravity 1.013, protein 2 plus, sugar negative sediment urinary 25 white blood cells and many casts per high power field; BUN 172 mg/100 ml, plasma creatinine 22.1 mg/100 ml, creatinine clearance 2.8 ml per minute; serum electrolytes, sodium 131, potassium 5.0, chloride 97, and bicarbonate 10 mEq per liter; total protein 6.7 (albumin 3.1 and globulin 3.6) gm/100 ml.

An electrocardiogram and roentgenograms of the chest, abdomen, and skull were normal.

Hospital course (VA Hospital until 1/4/65; Duke Hospital thereafter)

Peritoneal dialysis was carried out for four days beginning Dec. 15. From Dec. 20 to 31 the patient was confused and agitated intermittently but thereafter remained mentally clear. Hemodialyses were performed on Dec. 23, Jan. 26, and Feb. 2, 20, 19, and 24. Staphylococcal abscesses on the left buttock, in both nostrils, and in the right nostril were drained respectively on Dec. 31, Jan. 1, and Feb. 10. Parenteral and oral doses of nafcillin were used in controlling these infections and were later given prophylactically both before and after operation.

Selection of donor

Seven siblings, all of the patient's blood group (0), were willing to donate a kidney, and all were evaluated. The immunologic tests used principally were agglutination by the method of Amos and Peacocke[12], and test for cytotoxicity by Walford's method[13], but using the unabsorbed rabbit serum as a source of complement. Recourse was made to two additional tests, lymphocyte transformation in vitro[14] and the "third man test" with skin grafts[15]. On the basis of results of

these tests, the greatest weight being given to the two serologic tests, four siblings were excluded. The remaining three all gave little evidence of possessing antigens that were not present in the recipient. One of these three was excluded because of asthma. Of the remaining two, the one selected was the patient's 30-year-old brother, who by complete studies including aortography had been shown to be in excellent health and in possession of two normal kidneys. The results of the immunologic tests will be reported in greater detail in a later article[16].

Operation

Bilateral nephrectomy and renal allografting were performed on Feb. 26, 1965. The pathologic report on the kidneys removed from the recipient was "severe nephrosclerosis." The right donor kidney was implanted retroperitoneally into the left iliac fossa of the recipient, using essentially the technique described by others[1, 2, 3]. The period of total ischemia was 35 minutes. A course of azathioprine was started four days preoperatively and continued thereafter. Prednisone was added to the regimen on the fortieth day following transplantation when early signs of rejection appeared: rising blood pressure, slowly falling creatinine clearance, and an increase in the BUN. Good renal function was restored promptly and has been maintained on continued relatively modest doses of azathioprine and prednisone.

Hypercalcemia was present preoperatively and became more pronounced after operation: 5½ weeks post-transplantation the serum calcium level was 13.7 in association with hypophosphatemia and pronounced hyperphosphaturia and hypercalcuria. A subtotal parathyroidectomy was carried out 38 days post-transplant, leaving approximately 50 mg of parathyroid tissue. Two of the glands were diffusely enlarged to four or five times normal size, and at least three of the four glands contained chief cell hyperplasia (see discussion). The procedure was followed by a return toward normal urinary excretion and blood concentrations of calcium and phosphorus.

Follow-up

The patient was discharged from the hospital on May 15, 1965. As of Aug. 26 he is engaged in light work, and he has normal BUN and creatinine clearance values. He continues on a regimen of 150 mg of azathioprine and 15 mg of prednisone daily.

The donor made a complete and uneventful recovery and returned to work three weeks postoperatively.

Discussion

The ease with which rejection activity was controlled in this patient and his favorable course in general indicate a considerable degree of compatability between donor and recipient; but on the basis of a single case it cannot be said whether this occurred by chance or as a result of the matching studies. As exemplified in this case, a family with a large number of prospective consanguine donors who are ABO-compatible (see criterion 1 below) is an especially favorable circumstance, combining as it does the beneficial factor of consanguinity with the possibility of selecting a donor immunologically from a sizable number of prospective donors.

Because the number of transplants that can be done is small by comparison with the number of patients having severe chronic renal disease, only a small fraction of possible candidates can actually receive transplants. Numerous factors are considered in selecting prospective recipients. No rigid criteria are set, but the following are current guides, dictated in large measure by practical necessities, by the uncertainties of long-term results of renal transplantation, and by the problems of long-term immunosuppressive therapy:

1. The availability of a number of ABO-compatible prospective donors, preferably three if consanguine or six if unrelated. A donor is acceptable from the standpoint of erythrocyte type if donor and recipient belong to the same ABO group, if the donor is of group 0, or if the recipient is of group AB[17]. Other antigens of erythrocytes are of no known significance in the selection of kidney donors.

2. The presence of primary *chronic* renal disease with stable or deteriorating renal function; creatinine clearance of less than 5 ml/min. at the time of transplantation.

3. The absence of underlying systemic disease such as diabetes mellitus, primary gout, amyloidosis, and the absence of coronary, cerebral, or severe peripheral vascular disease or protracted congestive heart failure.

4. The capacity to cooperate in monitoring immunosuppressive therapy and renal function for a number of years.

5. Age preferably 21 to 45 years.

Steps are being taken to obviate the need for living donors by making cadaveric donors available in the Duke project, despite the fact that the process of donor-recipient matching is considerably more complex with cadaveric than living donors. For the present, however, the project is limited to the latter.

The clinical diagnosis of chronic glomerulonephritis was supported by the pathologic findings in the removed kidneys. The parathyroid disease of this patient was interpreted as hyperparathyroidism secondary to chronic renal insufficiency. Persistence of increased parathormone activity after restoration of normal renal function by transplant must have been due to the development of a degree of autonomous hyperfunction, which is not fully understood but which has been encountered in other cases of renal transplantation[18, 19].

Summary

1. A case of renal transplantation is reported in which the donor was selected immunologically from among seven siblings of the recipient. Six months postoperatively the transplant is functioning normally. Signs of rejection activity have been mild and readily controlled with low to moderate doses of azathioprine and prednisone. However, no conclusions can be drawn as to the efficacy of the donor-recipient matching studies on the basis of this single case or this early in the post-transplant period.

2. It is planned to carry out additional renal transplants using donors who have been selected on the basis of several donor-recipient tissue-matching methods.

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Symposium on Trauma

Initial Management of the Injured Patient in the Small Community Hospital

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In many of our tranquil Tar Heel communities, the sudden shriek of the emergency whistle begins another count-down for the care of the injured. The physician must have an interest in the over-all care his community gives the victims of accidents or violence. First aid at the scene should be prompt and of the highest quality. Transportation to hospitals or treatment centers should be carried out by properly trained personnel and by means of adequately equipped vehicles. It should be the surgeon's duty to encourage the highest standards in these two important phases of early management.

Those of us who are fortunate enough to have the assistance of rescue squads would not be without them. The people of our state owe a debt of gratitude to these dedicated volunteer groups. As a rule they are well versed in both first aid and transportation of the injured. We should encourage the formation of these organizations and aid in the training of their members.

Few would disagree that the bulk of the severe trauma in the smaller hospitals results from the ever-increasing number of automobile accidents. As long as the number of automobiles on the highways continues to increase rapidly while speed limits are raised and traffic patterns become more complex, the number of deaths and injuries can be expected to rise proportionately. This expectation is supported by the new record highway death toll in the United States during 1964—48.000.

In our ever more complex life, a considerable amount of trauma is also encountered from the farm, industrial scene, and home. The busy practitioner has frequent dealings with the effects of trauma. This is especially true of the young physician. In North Carolina, with our many small hospitals, it is quite obvious that the vast majority of the injured receive their initial care in such institutions. These hospitals rarely have house officers, and it is the practicing physician who renders the initial care. The fate of the injured depends greatly upon the quality of this care.

Two-way radio communication between rescue squad and emergency room makes for quicker and more efficient treatment. The physician on call may be notified of the accident while the injured are being transported to the hospital. Additional nurses or orderlies may be called from within the hospital. With such forewarning, emergency room personnel have time to clear out any of the less urgent cases. Our recent emergency room survey by the Trauma Committee of the American College of Surgeons reveals that only about one out of four emergency room visitors represents a true emergency.

Hospital Emergency Rooms

Physical requirements

Those of us who are especially concerned with trauma should request adequate space in emergency rooms. It should be usable and readily available space. The emergency department should be well marked by appropriate signs for the stranger, both on hospital property and at proper places in the community. Entrances to the emergency area should be sheltered and have a graduated ramp for stretchers. Sharp turns and cluttered hallways should be avoided as impediments to quick and easy movement of the injured.

An emergency room office or reception area should be so located as to make it easy to direct the injured to their proper places of treatment and to control visitors and

curiosity seekers. The treatment rooms should be large enough to accommodate several patients and equipped with curtains or cubicles for privacy. This will make it possible to use nursing personnel more efficiently. X-ray facilities should be in close proximity to the emergency area.

Needless to say, adequate lighting, air-conditioning, and hoses for wound irrigation should be at hand. An abundance of tap water, delivered by a housewife's sink hose is excellent for this purpose. Even in the smallest community hospital the emergency room should be equipped with oxygen, a working suction apparatus, a resuscitator, tracheotomy and cut-down sets, a laryngoscope, stomach tubes, a full but uncomplicated stock of emergency drugs, laceration trays, splints, and the like. The whereabouts of these supplies should be plainly marked and well known to the personnel.

Personnel

Inspection groups are now realizing that the best equipped, most efficiently run emergency departments are those with permanent personnel. In some hospitals the rooms are staffed with little regard for continuity or permanent responsibility. Unfortunately, in such cases those concerned do not take enough interest in this important work. An emergency room should be under the supervision of a good nurse who likes the work, who is assigned permanently, and ideally, who has no other duties. Proper instruction and encouragement from the medical staff will insure that she directs a good department. With a permanently assigned nurse, the whereabouts of the equipment is known, it is kept clean and in good condition, supplies are well stocked, and records are kept as they should be.

In small hospitals without house staffs, it is essential that emergency room personnel be well trained in first-aid measures. It may be five, ten or more minutes before a physician arrives. Some of our smallest hospitals use practical nurses at night under the supervision of the night nursing supervisor. If these nurses are interested in the work and continue in it long enough, they will become quite proficient. The physician must continually work toward this end by instructing them and trying to improve the care they give. Nothing is more discouraging to the physician, and also to the poor patient, than to have incompetent assistants who are ignorant of the care of trauma patients and unfamiliar with the location of supplies and equipment.

On reaching the emergency room, accident victims should not be moved from the ambulance or undressed without the order of physician.

Management

Evaluation

First things must come first in the management of trauma cases. Evaluation of the patient's general condition should always precede that of his specific injury. Only thus can priorities of treatment be established. At times, in a small hospital, one physician must rapidly survey several patients in order to determine his primary focus of attention. Usually a competent nurse can make this appraisal and suggest whom he should see first. Certainly respiratory distress or circulatory collapse will take precedence over all conditions. If our patient is conscious, we can learn a great deal about the mechanism of his injuries and the location of pain. Does he have dyspnea? Was he thrown from the car? Does his neck hurt? Has he walked? Can he move all his extremities? Has he been drinking? The pulse and blood pressure are noted. Life-threatening situations are dealt with quickly. An endotracheal tube may be inserted, a tracheotomy done, bleeding controlled, or anti-shock measures vigorously applied. Blood may be prepared for transfusion. If shock is not present, it should be anticipated.

Traffic accident victims in particular cannot be adequately evaluated unless they are undressed completely. The entire body surface should be inspected for abrasions, bruises, and lacerations; often more serious injuries will be discovered. Clothing stained with blood from the perineal region is especially significant.

A thorough physicial examination will seldom fail to reveal the significant injuries.

Areas of pain and limited function should be carefully examined. In all vehicular injuries, the common sites of serious injuries such as the contents of the cranial vault and the neck, chest, and abdomen should receive special attention. It is not unusual for these areas to show few signs initially when real damage is present. Examinations must therefore be scrupulously carried out. We all remember embarrassing cases where the obvious injury was treated after a cursory examination, while other injuries, sometimes of critical concern, were not discovered until later. It has been observed that especially where more than one medical specialty is involved, this danger must be guarded against by a thorough initial examination.

Record-keeping

Emergency room inspection groups generally associate good records with high quality medical practice. Detailed, accurate, and descriptive records are usually indicative of a thorough examination. Such records are also invaluable when the doctor finds himself on the witness stand being questioned about the length, depth, and location of lacerations on patients whom he cannot remember. Always describe the location and degree of pain. The present-day lawyer is becoming increasingly knowledgeable regarding medical fact and fiction. Embarrassment in court is best avoided by a careful and well recorded initial examination. Photographs may be added to the documentation when indicated. A mimeographed sheet of the check form type is of value when one physician is faced with several severely injured patients at once, and has to go from one to another frequently.

Treatment

After the initial evaluation is done and any obvious life-threatening situations dealt with, fractures may be splinted. Thomas splints, with the straps in place, should be kept ready for immediate use. In patients with obvious chest or abdominal injuries, light, well-padded casts are often applied for severe fractures of lower limbs while the patient is still on the emergency room table. This point is especially worth remembering in shock cases. X-rays may always be obtained later, and the cast may be changed easily when the patient's condition warrants it. A hundred-mile ambulance trip is much more comfortable for the patient with a cast instead of the splints usually employed. This is particularly true of bilateral fractures. Also, further contamination of compound wounds is avoided.

A few further generalizations are in order. In a small community hospital blood is more likely to be in short supply. With each instance of severe hypovolemia we must plan to keep ahead of our blood needs, as replacement may be two hours away.

Too much cannot be said in favor of irrigation, cleansing, and debridement of wounds. This should be done by the physician rather than a nurse. Gloves and mask should be worn. Repair of tendons as well as of extensive wounds should be done in the operating room. The use of general anesthetics in the emergency department is condemned. If at all possible, general anesthetics should not be used until gastric emptying is assured.

Conclusion

The physician working in a small community hospital must be well versed in every aspect of the care of the injured covered in this symposium. In dealing with trauma, he must be a general surgeon in the truest sense, seeing the wood as well as the individual trees.

* * *

Management of Mass Casualties

Report of a Local Disaster

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Wilmington

Excluding our encounters during active military service, few of us have had a significant experience in the management of large numbers of severely injured patients on an emergency basis. Military medicine logically is organized to accommodate a sudden influx of the acutely injured: basic triage and a table of organization; a medical staff based on capacity needs; overall adequate bed space; stock-piling of supplies; and training and recurring experience in handling a volume casualty load.

In contrast, civilian medicine is not generally so organized and geared. Overall bed space is inadequate and is usually filled to capacity; emergency room space and equipment are insufficient to cope with a sudden large patient load, while the staff lacks training and experience in managing mass casualties. Very simply we rarely, if ever, have had to deal with the problem and hence in general have tended to ignore it.

From a practical standpoint, a large number of empty hospital beds, idle operating and emergency rooms based in size and equipment on maximal needs, and a medical staff organized on expectancy rather than actuality would not seem to be the answer to the civilian problem. Experience we hope we shall never have, whereas training is assuredly our obligation.

Report of Disaster

In our largest Wilmington hospital, which has a capacity of 280 beds, 18,000 emergency room visits yearly, and by all standards an excellent medical and professional staff, we have had an increasing volume of multivehicle traffic wrecks, victims of large waterfront fires, and other accidents involving relatively large casualties. However, our experience in the management of a large number of severely injured patients has been limited to a single instance—an aircraft crash.

Fourteen casualties, all occupants of an Air Force transport, were admitted to the hospital. In summary, only one suffered immediately fatal injuries, another died in transit, and two died following transfer to armed forces facilities. No deaths occurred during local hospitalization. All victims suffered major injuries requiring definitive management.

At the scene

At a Sunday afternoon airshow witnessed by an estimated 20,000 spectators, a C-119 loaded with paratroopers, news personnel, and an Air Force crew apparently stalled on take-off, crashed from an estimated distance

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of 500 feet, and promptly burned. Within minutes foam was utilized, helicopters—a part of the static display in the air show—literally blew out the flames by a new technique, and attendants and bystanders, together with the less severely injured victims, evacuated the plane without delay.

Acts of individual and group heroism were numerous. Although several trained first-aid personnel and physicians were present and the latter in several instances rode the evacuation vehicles, virtually no first-aid measures were employed. Obvious fractures were not splinted, compressive bandages were not applied, and in at least one case an emergency tracheostomy that in retrospect would have been lifesaving was not performed. With these exceptions, all went well at the scene: management was skillful and removal was prompt and, at the scene, unimpeded.

Since live radio and television had been in progress during the entire show, the public was promptly informed of the disaster and literally thousands immediately descended upon the major hospital, precluding further transport by ambulance. The majority of the injured were evacuated by heli-

copter with the usual Air Force—Marine Corps skill, landing on the tennis courts adjacent to the hospital. From this point on, and for hours, crowds hampered necessary traffic flow to the hospital. Fortunately, two house officers were on duty, two physicians (non-surgeons) were in the hospital, and the surgeon on call, having been alerted, arrived before any of the injured.

Disaster plans activated

Wilmington, because of port facilities, military installations, and certain strategic industries, has been listed as a primary target area, and with this impetus a Civil Defense program has long been in operation, training a variety of professional and lay personnel. Although physician assignments and a table of organization including Red Cross participation had been developed and published, organizational meetings, meetings of participating physicians, and alerts or drills have never materialized to date. A hospital disaster plan had been drawn up, but with respect to doctors existed only theoretically. Enigmatically, nurses, hospital personnel, and others had been drilled thoroughly.

As in your hospital, work is organized and conducted by departments. Reasoning that any major disaster would basically involve surgical patients, the general surgical service tacitly had agreed that the surgeon on call would automatically become the director and triage officer in an emergency, thus assuring the immediate availability of a qualified surgeon at all times. In turn, his privilege was to call any additional physicians needed, beginning with those on call: orthopedist, urologist, anesthesiologist, neurosurgeon, internist, radiologist, pathologist. This simple plan worked well with the exception of the confusion resulting from radio announcements summoning all doctors and hospital personnel." (The authority for the summons could not be learned then or later.)

In all fairness, literally all area physicians arrived promptly. In addition, several visiting doctors volunteered, together with medical officers. Thus a three-to-one patient-physician ratio developed, somewhat hindering early management, a problem that was immediately and diplomatically resolved. Without exception every surgical nurse, head nurse, supervisor, anesthetist, and technician arrived in minutes, all on a Sunday afternoon.

Hospital emergency management

Utilizing principally the emergency room (which had been cleared of routine patients) with expansion into adjacent physical therapy and clinic space, each patient was examined promptly, identified, and appropriately tagged according to previous plan. Accurate records were begun and maintained throughout by doctors, nurses, secretaries, and aides; 0.5 cc of tetanus toxoid was administered; sedatives were given muscularly or intravenously as indicated; intravenous infusions begun, generally via intravenous catheters and utilizing 5% Ringer's or Dextran solution; appropriate oxygen therapy was instituted, and antibiotics were administered as indicated. Three tracheostomies were carried out simultaneously, one in desperation, and two fatally injured victims were removed immediately.

Within a few minutes all patients were assigned to an appropriate surgeon or surgical specialist and thereafter managed individually, promptly and well. All burns were cleansed with soap and water and irrigated with normal saline solution. Burn estimates were charted, initially by the "rule of nines"; appropriate intravenous and oral fluid regimens were outlined, using a modified Evans formula, and open burn management was instituted in private rooms. Admittedly, the use of private rooms would not have been practical had larger numbers of casualties been received, because of the requirement of private duty nurses.

Our intensive care unit was then in the early phase of construction, and general anesthesia was not initially used for any burned patients. Lacerations were debrided and closed where appropriate. Contused, excoriated, and macerated ragged or avulsion wounds were excised and thereafter closed secondarily. Only closed fractures involved

Table 1

Summary of Casualties

Patient		
C.J.	Compound maxillofacial injuries; closed brain injury, minor	Dead on arrival
M.P.	Open head injury; thermal burns 40%, full-thickness; multiple fractures, open and closed	Dead on arrival
J.McN	Thermal burns, 36%, full-thickness; facial lacerations, multiple	Died on 53rd day
J. C.	Thermal burns, 16%, full-thickness; compression fracture, L-4	Died on 20th day
R.McD	Thermal burns, 20%, full-thickness; open fracture, left tibia	Survived
B.L.	Depressed skull fracture, open, with brain laceration; multiple mandibular fractures; multiple facial lacerations	Survived
W.M.	Compound maxillofacial injuries, severe	Survived
J.W.	Compression fracture, D-12; closed fracture, left radius; closed fracture, left tibia	Survived
J.P.	Intratrochanteric fracture, right femur; left pubic rami fractures; open comminuted fracture, right supraorbital; severe facial soft-tissue injuries; fracture, left 7th rib	Survived
J.N.	Multiple facial lacerations; fractures right pubic rami	Survived
W.C.	Multiple facial lacerations; comminuted fracture, right mandible; closed fracture, right ilium, ischium, acetabulum	Survived
C.M.	Closed fracture, right elbow; compression fracture, left calcaneous; thermal burns, 8%, partial thickness	Survived
R.LeM	Thermal burns, 20%, partial thickness; compression fracture L-3, fracture transverse and spinous processes L-2, L-3	Survived
J.H.	Fracture dislocation, L-3, L-4; closed bimalleolar fracture, left ankle; bilateral open fractures, ischial tuberosities; multiple scalp lacerations	Survived

the burned patients, and were managed by traction or temporary plaster technique.

All patients having maxillofacial injuries, open fractures, and cranial injuries, when stabilized, were removed to surgery and appropriately treated. With five operating rooms in use simultaneously, all patients had received early definitive management within four hours of the accident. Prior to removal or transport from the emergency area, all long-bone fractures were either splinted or traction devices applied.

Although x-ray facilities except portable and operating room units are far removed from the emergency room, priority was promptly established and examination made without delay or confusion. All radiologists and a sufficient number of technicians were present. Similarly, with excellent supervision on the part of the laboratory directors, routine laboratory work was accomplished immediately.

Thanks to an excellent blood bank, blood was readily available. The approximately 200 donors who appeared were not needed at the moment, but several contributed blood that night and on the following day. In essence, all patients were managed on an individual basis; routine hospital admissions were logically curtailed, but only temporarily, and on the following morning all scheduled operations proceeded without difficulty.

The emergency phase was over; initially all patients were in good condition, though many days of intensive care remained. As mentioned previously, no fatalities ensued during local hospitalization.

Discussion

Although the number of casualties was not large, all had sustained major injuries requiring comprehensive management, and on review some deficiencies became apparent. Certain criticisms were in order, useful conclusions could be drawn, and in many phases of management praise was certainly deserved.

First aid and evacuation: Assistance was afforded enthusiastically and promptly;

however, first aid virtually did not exist. Fractures were not splinted, no attempts were made to control hemorrhage, and, most significantly, air-ways were not maintained. The simple expedient of placing one victim in the prone rather than the supine position would have been life-saving; autopsy in this case showed no severe injuries, and death resulted from aspiration. All victims, regardless of condition and severity of injury, were evacuated with unseemly haste to a single hospital—the largest—and none to hospitals of 125, 100, and 90 beds, each staffed and alerted. Patients with relatively minor injuries, together with one who died immediately, were evacuated before several others requiring prompt attention.

As noted, trained professional and lay personnel were on hand, but an obvious lack of coordination, not unwillingness nor inability, became apparent. It is felt that overall command, at the scene, logically should rest with a trained law-enforcement officer assigned the responsibility of delegating authority appropriately to those with various skills. To our knowledge, the Civil Defense organization did not participate, per se, in spite of previous organization and intensive training.

Transportation: Ambulances and then helicopters, as pointed out, performed their role with dispatch, and any delay did not rest with them. Crowds were not managed; control of highway and street traffic was faulty, and initially undirected. A large number of casualties would have posed insurmountable problems and in all probability precipitated a real disaster. Strict law enforced traffic control alone affords a solution to this problem.

Communications: Law-enforcement agencies, Armed Forces, and Civil Defense radios were not well utilized. Hospitals were alerted by various means but were not told how many casualties to expect. An unusual circumstance was active TV and radio coverage at the time of accident, and assuredly contributed to the mass descent of concerned and merely curious citizens, along with accident buffs to the hospital scene. Also, public communications media issued the unauthorized summons of all doctors to report to the hospital. Certainly the police, sheriff's department, and Civil Defense radios could have been utilized. What an invaluable opportunity to test Civil Defense preparedness!

Records: Accurate tagging, preliminary records, and final comprehensive hospital charts during the acute stage, and then during hospitalization and on transfer, were praiseworthy; no criticism is in order.

Emergency and hospital care: Personnel in all categories must be commended for emergency and continued care, particularly in view of the absence of the hospital administrator, who was out of the city at the time. A minimal degree of early confusion and milling about of all three hospital shifts at the same time was rapidly resolved. Stock supplies and equipment were adequate, and no delays were encountered on that score. Off-duty personnel contributed their services unhesitatingly and without remuneration. Incidentally, with this example all surgical fees, though collected, were contributed to a disaster unit fund which is presently being used in our new hospital construction.

In this instance, the "on call" surgeon system worked satisfactorily if not perfectly. In situations involving significantly higher numbers, a more definitive organization with formal triage similar to that employed in military medicine, putting the interest of the greatest numbers foremost, would be required. More active hospital-physician disaster planning and actual rehearsal is indicated. The surgical results speak for themselves; follow-up revealed that all patients have resumed their civilian occupations or military assignments.

Summary and Conclusions

Fourteen victims of an air force transport accident, all severely injured, were managed. There were two immediate fatalities and two subsequent deaths from burns following transfer to another hospital at 20 and 53 days respectively. On-the-scene management, immediate first aid, transportation, and traffic control were deficient, as has been the case in other disasters[1-3]. Hospital

and surgical care were praise-worthy; however, the ability to cope with a larger number of casualties under the present organization is questionable. A more definitive disaster plan with more active physician participation is necessary.

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Management of Blunt Abdominal Trauma

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Our present interest in blunt abdominal trauma is stimulated by the progressive increase in traffic accidents over the past few decades. The automobile is responsible for approximately 50% of non-penetrating abdominal injuries[1]. There have been twice as many liver injuries attributable to blunt trauma in the last 7 years as in the previous 15 years[2]. Blunt abdominal trauma is infrequent in terms of total hospital admissions, comprising less than 0.1% of the admissions to a large general hospital, and about 1% of the admissions for trauma. The mortality rate, however, is still at least 20 to 30%.

Deaths from trauma are often condoned by the excuse that the patient died before anything could be done. Table 1 summarizes a three-year study by Van Wagoner[3] of 606 traumatic deaths in male soldiers, 516 of whom were subjected to autopsy. He found that 90% of the victims were in a hospital within two hours of injury and that 75% lived at least two hours after being seen by a physician. Sixteen per cent of these patients had blunt abdominal injury. This would indicate that the majority of patients with such trauma will live long enough for their injuries to be appraised and correct therapy instituted. He felt that one sixth, or at least 101, of the 606 patients would have had an excellent chance of survival had diagnosis been made promptly and adequate treatment instituted. Two hundred forty-six had received no treatment or supportive treatment only, and of these, 75 were considered salvable while an additional 69 might possibly have been saved with proper treatment. These figures indicate that much can be done to lower the mortality from blunt abdominal and other trauma.

Table 1
Analysis of Deaths Following Trauma*

No. deaths			606
No. autopsies			516
Abdominal injuries	16%		
Patients in hospital within 2 hours of injury	90%		
Patients living 2 hours after reaching hospital	75%		
Patients receiving no treatment or supportive treatment only	40%		246
Salvable		75	
Possible salvage with proper treatment		69	

*From Van Wagoner (3)

The injured patient is more often male, the sex ratio varying from 3:1 to 22:1 in different series. Seventy per cent are within the 20-50 year range. The spleen, liver, and kidneys have been reported as the most frequently injured abdominal viscera, but a composite picture from numerous series would indicate that the frequency of injury is as follows[4]:

Table 2
Site of Injury After Blunt Trauma

	Percent. Cases
Spleen	26.2
Kidneys	24.2
Intestines	16.2
Liver	15.6
Abdominal wall	3.6
Retroperitoneal hematoma	2.7
Mesentery	2.5
Pancreas	1.4
Diaphragm	1.1

Table 3
Pressure (mm Hg) According to Site of Recording Catheter

Site	No.	Pressure Range	Average Pressure	Median Pressure
Peritoneum	32	80-675*	375	340
Small intestine	21	75-550	235	220
Stomach	17	40-355	182	110
Sigmoid	13	80-450	304	230

Peritoneal pressure less than intestinal pressure only 4X. After Williams and Sargent (5).

Mechanism of Injury

Most authorities agree that the mechanism of injury to solid organs in the abdomen is due to a shearing force against the many fixed points these organs present within the abdomen. The mechanism of intestinal rupture from blunt trauma is not so clear-cut. Three mechanisms have received varying emphasis in recent years. These include (1) tangential tears at fixed points; (2) a sudden increase in intraluminal pressure; and (3) crushing blows against the vertebrae. Williams and Sargent[4, 5] devised a method to evaluate the mechanism of intestinal injury by dropping a 50-pound weight 8 feet to strike a board placed over the abdomen of anesthetized dogs. Pressures within the various abdominal hollow organs and peritoneal cavity were recorded. The most significant changes occurred within 0.2 second of injury.

Table 3 shows that the intraperitoneal pressure exceeded the pressure within the hollow organs in all instances except four, and then it was felt that the tubing to the transducer was compressed by the striking force. The dogs were autopsied immediately after injury without moving. Injuries comparable to those seen in human beings from non-penetrating intraabdominal trauma were produced in all dogs. All of the injuries were in the midline, suggesting a compression of the viscus between the striking force and the spine. When the board was arrested 6.5 to 10 cm. from the dog's posterior skin, only minor injuries occurred, while the pressure recordings were essentially the same. These studies suggested that intestinal injury from blunt trauma resulted primarily from compression with tearing between the abdominal wall and spine. The site of injury cannot be related directly to the intraluminal pressure, to the usual fixed points, or to the presence or absence of air and fluid in the intestinal tract. Peritoneal fixed points do affect intestinal injury indirectly by placing certain segments of intestine over the spine.

Diagnosis

Diagnosis of blunt abdominal trauma requires intelligent interpretation of the history, physical findings, and laboratory data. Often one must rely on repeated physical examination alone. The usual clinical evidence denoting rupture or other injury of intraabdominal organs is commonly absent or incomplete because of shock, alcoholic intoxication, or unconsciousness. More obvious associated injuries such as fracture, or thoracic or cranial trauma may lull the inexperienced surgeon into a false sense of security. Only a high index of suspicion based upon experience can avoid a tragedy consequent upon too long delayed abdominal exploration.

Abdominal pain and tenderness are the most common symptoms associated with intraabdominal injury[1]. Other findings include rigidity, shock, ileus, flank dullness, rebound tenderness, and hematoma of the abdominal wall. The subsequent development of signs will depend on the nature and extent of the injury. Ruptures of solid organs such as the liver and spleen are associated with signs of intraperitoneal hemorrhage, while those of a hollow viscus show signs of peritonitis. Kleinert and Romero[6] report that peristalsis was absent or diminished in 40% of patients with intraabdominal injury. Of patients with splenic rupture, about one third have associated fractures of the left rib cage[7]. It is worth repeating that nothing can take the place of continued observation of the injured patient in making

Table 4
Nature and Cause of Delayed and Obscure Intraabdominal Hemorrhage

Site	No. Cases
Spleen	20
Auto accident	6
Fall	4
Beaten or kicked	1
Thoracentesis	2
Duodenal wall or pancreas	3
Fall	2
Football injury	1
Kidney (needle biopsy)	1
Undetermined	3

After Altmeier, Sherman, and Fultz (13)

a correct diagnosis and instituting the correct treatment.

Laboratory and x-ray studies are useful only to a degree. Many investigators attach importance to leukocytosis, especially as an indication of correlated intraperitoneal hemorrhage. Berman and associates[8], in a report of 338 patients, correlated leukocytosis with internal hemorrhage, particularly from the spleen and liver. They felt that a white blood cell count of 15,000 justified suspicion of a ruptured solid organ or organs if other findings were compatible with the diagnosis. Serial hematocrit levels are more helpful and meaningful than those determined immediately after injury.

If time permits, erect, supine, and lateral decubitus films should be made of the abdomen. They should be examined for evidence of (1) fracture or dislocation of skeletal parts; (2) alteration in the size, shape, and position of visceral and soft tissue; (3) pneumoperitoneum; (4) indirect evidence of ruptured viscera with secondary hemorrhage, such as an increase in the density of a region caused by displacement of neighboring structures or by the accumulation of fluid pockets between gas shadows[9]. Roentgenography does have its limitations, and it may be wiser to omit routine studies in order to gain promptness in treatment. Zollinger and Williams[10] found roentgenography useful in one third of their patients. It is least useful in diagnosis of injury to the solid viscera.

Diagnostic abdominal puncture, insertion of a Levin tube or a urinary catheter often aid considerably in making the correct decision as to a specific plan of treatment. Many investigators have described the use of abdominal tap without complication. Byrne[11] reported its use in 100 patients with abdominal trauma from a group of 417 patients. Taps were made in four quadrants with a no. 18 spinal needle. Blood was the most frequent finding, although bile, intestinal and gastric contents, pancreatic fluid, fecal matter, and air were also obtained. The overall accuracy of diagnosis with this procedure was 83%—about the same as that reported elsewhere[10, 12]. Everyone agrees that a negative result is meaningless and should be ignored or followed by another tap.

Table 5
Time of Delayed Splenic Rupture Following Injury

	No. Cases	Per Cent
First week	5	42
Second week	4	33
Third week	0	0
Fourth week or later	3	25

Delayed Abdominal Hemorrhage

Another most difficult problem associated with abdominal injury is delayed intraabdominal hemorrhage. Table 4 lists the causes of delayed or obscure intraabdominal hemorrhage in a series of 30 patients from the Cincinnati General Hospital[13]. Two-thirds of the cases were due to splenic rupture. Approximately 15% of non-penetrating injuries to the spleen result in delayed rupture. The symptoms are primarily those of severe intraperitoneal hemorrhage with varying degrees of shock and a falling hematocrit level. There is associated pain and tenderness of the abdomen, with referred pain to the shoulders in the majority of cases.

Table 5 shows that 75% of cases of delayed hemorrhage occur within two weeks of injury. It is significant that the onset of delayed hemorrhage is not associated with marked activity. In one series[14], three patients were awakened from sleep by the onset of bleeding.

The common diagnostic errors associated with delayed hemorrhage are due to (1) lack of visible signs of injury to the anterior abnominal wall; (2) a misleading history;

Table 6
Mortality As Related to Number of Organs Injured

	Mortality
Single organ	8%
More than one organ	38%
Organs plus extraabdominal injuries	70%
Total mortality	24%

(3) the mistake of attributing shock to associated injuries; and (4) a false sense of security induced by the recession of the primary symptoms. It is important to suspect splenic or hepatic bleeding in all patients with lower rib fractures.

Mortality

The mortality of blunt abdominal trauma continues to be high—in the range of 20 to 30%. The overall mortality for nonpenetrating injury to the spleen remains about 20%[1, 6, 13-16], and to the liver about 55%[1, 2, 6, 15, 17-19]. As shown in tables 6-8, the mortality is directly related to the number of organs injured. It is also directly related to the multitude and complexity of associated extra-abdominal injuries, particularly to the head. In a large series, one half of the deaths from blunt trauma were due to head injury[2].

Mortality tends to parallel abdominal signs and symptoms. Gerald[17] reported 10 deaths among 41 patients having generalized abdominal pain, and one death among 28 patients having localized pain. Abdominal distention was associated with a mortality of 41%. With injuries to the intestines, mortality is directly related to the time interval between injury and operation. Fifteen per cent of those operated on within 12 hours died, as compared with 66% of those reaching operation after 12 hours[1]. The major cause of death is inability to control hemorrhage from a large vessel, and the second, renal insufficiency secondary to prolonged shock.

Treatment

Once an intraabdominal injury is suspected or determined, operation is not delayed in an attempt to reverse hypotension completely. Surgery is considered an integral part of resuscitation. Once the abdomen is open, systemic exploration with control of hemorrhage and closure of perforated organs is the surgeon's primary concern.

With regard to specific injuries, splenectomy is of course the treatment of choice for splenic rupture. Liver injuries are managed by debridement, suture, or hepatic resection. Longmire[15] and others[2, 17] consider the establishment of adequate external drainage both for bile and for products of

Table 7
Mortality Associated with Splenic Rupture as Related to Other Organs Injured

No. Additional Organs Injured	No. Patients	No. Deaths	Mortality
None (spleen only)	32	3	9%
1	40	4	10%
2	44	7	16%
3	43	13	30%
4	20	5	25%
5 or more	20	13	65%

After Sherkey and others (14)

Table 8
Mortality Associated with Hepatic Injury as Related to Other Organs Injured

No. Additional Organs Injured	No. Patients	No. Deaths	Mortality
None (liver only)	210	10	4.8%
1	200	22	11.0%
2	110	26	23.6%
3	52	15	28.4%
4	42	16	38.1%
5 or more	26	22	84.1%

*After Allen, and others: Surg Gynec Obstet 114: 650-654, 1962.

tissue necrosis to be the most important feature in the surgical treatment of hepatic wounds. It is well established that gauze packs for control of hemorrhage from the liver is not an acceptable method of dealing with this problem. Lesions of the duodenum, and especially retroperitoneal lesions, have been missed at operation in 33 to 50% of cases[20]. The treatment of pancreatic injuries is usually conservative; however, severe ones may be treated with drainage and at times by pancreatic resection[1, 21, 22]. The treatment of injuries to the extrahepatic biliary tree is necessarily surgical repair, as Smith and Hastings[23] report 100% mortality for patients not so treated.

Last, but not least, injuries to the abdominal wall are the most difficult to diagnose. The pathologic processes incurred are ecchymosis, hematoma, muscular strain or disruption. Muscular guarding and rigidity may be present. Localization of the pain and tenderness tries the diagnostic astuteness of the most experienced examiner.

Conclusion

Blunt abdominal trauma is a serious and growing problem. It behooves us who are faced with these injuries to review our own past experience with a critical eye, in the hope of doing a better job in the future.

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Management of Chest Injuries

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Since the management of chest injuries is too broad a subject to be adequately discussed in the allotted time, this paper will be confined primarily to chest injuries most commonly seen in civilian practice. These include (1) contusion, or crushing injuries, and (2) penetrating or perforating wounds. The former result primarily from automobile and industrial accidents, while the latter are inflicted by knives, ice picks and guns, as in the all too common crimes of passion.

In treating chest injuries of *any* degree of severity, it must be remembered that they are frequently associated with severe injuries in other parts of the body, especially the head and upper part of the abdomen, which may mask important signs of chest trauma. There may be little external evidence of trauma associated with severe shock, dyspnea, and cyanosis.

General Principles

The two most important requirements in treating chest injuries, regardless of the initial impression as to severity, are (1) to give the patient good ventilatory function; (2) to keep his lungs as free as possible of secretions.

It must be remembered that chest injuries may be evidenced *immediately,* as in an acute penetrating wound with rapid collection of blood and air in the pleural cavity; or the appearance of symptoms may be *delayed* for hours or even days, as in the case of localized contusion of the chest wall with fracture of a rib which has torn the lung enough to cause slow leakage of air and delayed pneumothorax or subcutaneous emphysema, or contusion of the lung with delayed pleural effusion.

A maxim that I have repeatedly emphasized is: "A blow severe enough to fracture a rib is often severe enough to produce underlying damage to a lung or other organs."

Almost all chest injuries primarily involve the supporting and protective chest wall, and it is possible that they will also affect one or more of the intrathoracic organs or anatomic structures supporting or separating these organs. Organs or structures that may be involved are the skin, ribs, sternum, and chest wall; one or both lungs; the heart, great vessels, esophagus, diaphragm, trachea, and major bronchi.

As stated, evidence of injury to any one or several of these organs may be immediate or delayed. Fortunately, injuries to the lungs, heart, diaphragm, and chest wall, however, are quite common. Also common are injuries of adjacent organs—that is, the spleen, stomach, liver, pancreas, kidneys, and fixed or unfixed areas of small or large bowel.

The initial careful physical examination must be done without aggravating the injuries or resultant shock, if present. It is important to ascertain as quickly as possible whether there are concomitant injuries of the head, neck, abdomen, pelvis, or extremities. Particular attention should be paid to the following:

1. Shock, with or without obvious blood loss.
2. Dyspnea. Note presence and severity.
3. Apparent location of any wounds, whether penetrating or blunt, simple or multiple.
4. Stability or lack of stability of chest wall. Look for flail segments, sucking wounds, depressed areas as of the sternum, and obvious foreign bodies.
5. Evidence of patency of the airway and ability of the patient to cough effectively.
6. Evidence of air or fluid or both in either or both hemithoraces, and mediastinal shift if present.
7. Forcefulness of the heart beat and any evidence of distention of neck veins, with particular reference to identifying cardiac tamponade or increasing shock.
8. Cyanosis.

Ancillary diagnostic measures in the chest examination should include posteroanterior (PA) and at least one lateral film obtained as soon as possible if the patient's condition will permit him to be moved safely. If his condition is poor, even a reclining anteroposterior film obtained with a portable x-ray machine may be of considerable help.

Treatment

Shock. Since the majority of physicians are familiar with the treatment of shock, it will suffice here to say simply that the intravenous administration of fluids and blood and the relief of pain are the principal supportive measures used.

Establishment of an adequate airway may be easily achieved in a conscious patient by simply laying him flat and keeping his chin elevated. An oral airway may be needed if there are also mouth or jaw injuries, and frequent suctioning may be required to prevent blood from entering the pharynx and trachea. Do not use constant suction more than 15 to 30 seconds at a time or hypoxia may ensue.

If the patient is well able to cough, nothing more may be needed. If, however, he is unconscious; has facial or head injuries or severe instability of the chest wall with flail segments; or if he is cyanotic from any cause, an endotracheal tube may have to be passed quickly or a tracheostomy performed. Tracheostomy is preferable if the situation is critical and likely to require long-term treatment with frequent suctioning, stabilization of the chest wall, and so forth, for these problems decrease the effectiveness of coughing. By-passing the laryngeal and glottic pressure by tracheostomy improves the effectiveness of the cough, decreases tracheal "dead space" air, and facilitates intratracheal and bronchial suctioning.

Placing the patient in a moist, high-oxygen-content atmosphere further reduces respiratory effort and tends to thin secretions and make them more easily removable.

Relief of pain, and *stabilization of the chest wall* often go hand in hand, since fractures of ribs, contusions of muscles, nerves and pleura, and irritation of the parietal pleura by blood or air are the primary source of pain. Treatment consists of (1) the administration of frequent small doses of some non-respiratory-depressing narcotic; (2) stabilization of the chest wall; and (3) intercostal nerve blocks.

I usually tape the affected area if it involves no more than three to four ribs, but this must be done cautiously since restriction of motion over a contused area of the lung limits the aeration of this part of the lung and is conducive to the development of atelectasis, or what I term "contusion pneumonitis." I avoid the use of the so-called chest binder or belt because these devices, while easily removable, hinder respiratory motion bilaterally. The application of sand bags to extensive areas of the chest is probably a safer method of stabilization.

The third method of relieving pain—the use of intercostal nerve blocks—is helpful but often proves to be quite time-consuming, especially in cases of multiple rib fractures where many blocks may be needed. Even with intercostal polyethylene catheters in situ, the procedure can be troublesome and ineffective because of plugging or displacement of the tiny cathers. I personally have abandoned this method of relieving pain except in cases involving only one or two fractures. I prefer to combine small frequent doses of narcotics with stabilization of the chest wall.

Operative procedures for stabilizing the chest wall may be indicated, but only in a relatively small percentage of the cases. Elevation of depressed sternal fragments may easily be accomplished (using local anesthesia) by placing one or two screws in the involved fragments and pulling them out by elastic traction to an overhead frame or a plaster shell about the chest. Depressed rib fragments may be similarly elevated, but usually are more easily raised with towel clips or pericostal wire sutures. Both of these methods may be used to stabilize flail segments due to rib fractures, anteriorly and laterally or posteriorly. In more extensive crushing injuries to the chest, particularly bilateral ones where from 5 to 24 ribs may be fractured, a mechanical respirator

and tracheostomy, together with sandbag stabilization, may well be needed.

5. *Immediate treatment of small sucking wounds* may be achieved by placing folded Vaseline gauze (or even plain gauze if Vaseline is not available) over the wound as an emergency measure. Flat Vaseline gauze is preferable to a pack or roll, because it allows air to escape without being sucked in. If pressure dressings with plan gauze have to be used as a lifesaving stabilizing plug, careful watch must be maintained for evidence of tension pneumothorax. The dressings must be loosened occasionally until an intercostal pleural cavity tube can be inserted and attached to water-seal or suction drainage.

In cases of severe loss of chest wall tissue, as in shotgun wounds or severe trauma from automobile injuries, immediate light packing is probably the most effective way to control air leakage and bleeding pending transfer to the operating room for debridement and, hopefully, development of muscle flaps to fill in the defect.

6. *Removal of air or fluid from pleural cavities* is a necessary and urgent procedure to relieve dyspnea and cyanosis by improving aeration of the lungs through re-expansion. In less urgent situations it is necessary to help re-expand the lung and prevent atelectasis or chronic hemothorax or effusion. If air and fluid are not removed quickly and well and the lung remains unexpanded, many serious consequences may ensue. Examples are tension penumothorax, chronic pneumothorax or hemothorax (or both) which may develop into empyema, and imprisonment of atelectatic lobes of the entire lung by a strong "peel." Any or all of these complications may ultimately lead to death or thoracotomy for decortication.

The simplest procedure for removing air and fluid is thoracentesis. If air leakage is minimal and transient, or if fluid accumulation is slow (not rapid hemorrhage), this procedure may suffice. It may have to be done daily until gradual decrease of the fluid or air results in re-expansion of the lung and a dry pleural cavity.

If the volume of air or fluid does not continue to decrease with repeated thoracenteses, some other measure is required. In the presence of rapid bleeding, excessive air leakage indicating a major bronchial injury, or fluid resembling esophageal or gastric material, thoracotomy is indicated. These instances are relatively uncommon but do occur (especially bleeding) often enough to be considered. If air leakage or fluid formation is not controlled by thoracentesis, an intercostal catheter should be placed into the pleural cavity involved. For extensive leaks I prefer large (18 to 36 French) catheters and the use of constant suction of 15 to 30 mm Hg. negative pressure to keep ahead of the leakage of air or fluid accumulation. Several catheters may be needed in some instances, for large volume-flow output is needed to keep ahead of the intake. There is no reason not to re-expand the lungs as quickly as possible. Excessively high negative pressure may sometimes help to keep an air leak open, but not usually. Low pressure, large volume flow output is preferable, however.

If the problem is simply a small air leak and no associated fluid, simple water-seal drainage without suction is all that is ncessary as long as daily improvement continues. Even when chest roentgenograms show complete expansion of the lung, I prefer to leave the tubes in the pleural cavity for at least 48 hours after they have apparently ceased to function. This is evidenced by absence of drainage and maintenance of a steady negative pressure on the manometer, if one is used. This two-day period gives adequate time for good adhesions to develop between visceral and parietal pleural surfaces.

As stated previously, rapid or persistent intrathoracic bleeding usually indicates the need of a thoracotomy. Intercostal and internal mammary vessels are often the source of bleeding and occasionally the major pulmonary vesseles are. Fortunately, the aorta or its major branches are rarely found involved in the surviving patient.

Cardiac tamponade usually arises as either an almost immediate or somewhat delayed result of a direct stab wound of the

heart. Hypotension, venous distention, and a marked decrease in the heart beat are the three most significant signs associated with a definite small puncture wound of the chest wall in the cardiac area. Prompt aspiration of the pericardium through the subxiphoid approach should be done and repeated as needed to suture the wound of the cardiac wall. (Thoractomy may be indicated.)

Myocardial contusions are frequent but fortunately are rarely serious. The electrocardiogram will usually confirm the diagnosis by showing delayed changes of an inverted T wave change.

Injuries to the great vessels are rarely found in surviving patients, although occasionally delayed evidence of rupture of the aorta or major branches may develop. Recognition of these complications may be difficult, especially if other injuries are present. The ultimate diagnosis will usually be made on the basis of suspicion and the definitiveness of arteriography. Treatment will require surgery in a center equipped for it.

Summary

The types of chest injuries most commonly encountered in private practice are (1) contusion or crushing injuries, and (2) penetrating or perforating wounds. The essential requirements of treatment are good ventilatory function and an airway free of secretions.

Chest injuries primarily involve damage to the chest wall and often one or more of the intrathoracic organs and connecting structures. They are often associated with, and sometimes masked by, injuries to other parts of the body, all of which must be diagnosed and treated.

Chest injuries involving specific organs and structures are discussed with regard to diagnosis and treatment and possible serious consequences.

It is emphasized that evidence of serious trauma may be immediately evident or delayed, thus necessitating extreme care in diagnosis.

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Management of Vascular Injuries

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Fifteen years ago it was acceptable to ligate a major artery following trauma and to expect a high amputation rate in order to save a life. Recent advances in vascular surgery have dramatically demonstrated that arterial repair with restoration of normal blood flow is the prime objective of treatment.

Reconstructive arterial surgery began almost 200 hundred years ago with the successful repair of a lacerated brachial artery[1]. Carrel[2] described satisfactory techniques of arterial suture and anastomosis more than 50 years ago. This knowledge remained dormant until DeBakey and Simeone's analysis of World War II injuries[3] revealed the poor salvage rate when ligation was accepted as the procedure of choice. The rapid advances in cardiovascular surgery, and the experiences gained in arterial suturing during the Korean conflict established arterial repair or reconstruction as the best method of treating arterial injuries[4-6]. During the Korean war Hughes[4] found the overall amputation rate associated with ligation to be 51.4%, as compared with 13% for repair. These dramatic military surgical techniques have been shown to be equally applicable in the management of vascular injuries encountered in civilian practice.

In civilian arterial injuries the male is involved eight times as often as the female, because most of these injuries represent aggressive acts of violence while only a small

percentage are due to automobile accidents. Approximately two thirds of arterial injuries involve the extremities, and are frequently associated with damage to adjacent nerves, veins, bone, or tendons.

Patman et al.[8], in reporting 271 civilian arterial injuries, found the brachial, superficial femoral, radial, axillary, and ulnar arteries to be involved more frequently, and in this order. By attempting to repair or reconstruct the injured vessles, the amputation rate was reduced to 3.8%.

Diagnosis of Arterial Injury

Classically the ischemic extremity appears pale, cadaverous, and cold to the touch, with collapsed superficial veins and absent pulses. It must be remembered, however, that an artery may be severely injured or partially transected and show no clinical evidence of a decrease in distal pulsations. The presence of normal distal pulsations in a significantly injured vessel proximally is more common in the upper extremity because of the more abundant collateral circulation. The use of an oscillometer is helpful in determining the amplitude of pulsation in the normal extremity; then, by comparing it with that in the injured extremity, it is possible to detect an otherwise unrecognized major impairment of flow rate.

Indications for Exploration of Wounds of the Extremity

All injuries above the knee or elbow should be explored if a peripheral pulse is absent provided the patient is not in shock. The presence of a pulsating or enlarging hematoma is adequate indication for immediate exploration. A bruit caused by a partial thrombotic occlusion or rapid development of an arteriovenous fistula is audible and indicates immediate exploration.

In the absence of these positive clinical indications for exploration, arteriography is useful in determining the type and location of an arterial injury. Diminished or absent pulses may be due to arterial spasm, which is often associated with fractures or joint dislocations and may respond to reduction of the fracture or dislocation with or without sympathetic nerve blocks.

Treatment of Arterial Injuries

The conservative or non-surgical approach to major vascular injuries should be abandoned in favor of aggressive surgical repair or reconstruction.

Initial treatment

A tourniquet should be used only when pressure applied directly to the wound area fails to control bleeding. Blindly clamping a vessel in a bleeding wound is to be discouraged, since it may permanently damage a major artery or vein that might otherwise be preserved by a simple suture closure of the bleeding point. An important adjacent nerve trunk might also be injured. Pressure is applied with the finger until the bleeding can be controlled by the use of non-crushing arterial clamps or by tapes passed around the vessels with pressure occlusion.

As indicated, administration of dextrose or plasma is started while blood is being cross-matched and the operating room readied. Antibiotics in large doses are advisable early, and tetanus antitoxin or toxoid is administered.

Operative techniques and principles

After the wound is irrigated and prepared with an antiseptic solution, all non-viable tissue is debrided. The incision is enlarged to permit proximal and distal control of the artery and vein, and bleeding is prevented by the application of non-crushing vascular clamps.

The artery is immobilized and the adventitia at the site of injury is carefully removed from the vessel. A periarterial sympathectomy is thus accomplished.

Arterial spasm, if it is the only lesion present, usually responds to periarterial sympathectomy; if not, it may be achieved by the injection of procaine or papaverine. If the distal circulation is not restored by these methods, an intimal tear with an intraluminal thrombus should be suspected. The artery should be opened for inspection and a Fogarty catheter[9] inserted into the distal

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lumen to remove thrombi. By inspecting the lumen locally, testing proximal flow, and knowing the status of the patency of the distal arteries, one can decide whether local resection of an injured artery is necessary.

If the intima is severely damaged, resection of the vessel will usually be necessary. About 1 cm of the vessel should be excised beyond the point of injury after a laceration and 3 cm after a gunshot wound. A primary anastomosis of the vessel is desirable as long as undue tension can be prevented; when this is not possible a graft should be used. A saphenous vein graft is the choice for small arterial replacements in the extremities. It must be reversed because of its valves, but it is easy to suture as an end-to-end or end-to-side anastomosis. Collateral vessels are sacrificed only when required for mobilization. For larger replacements, such as those involving the abdominal aorta, Dacron plastic grafts are used.

Prosthetic devices should be used in traumatic injuries of the extremities only when other means of arterial restoration are not possible. This type of wound is contaminated and the risk of infection is already present. An autogenous saphenous vein graft will resist infection much better than will a Dacron or Teflon graft.

Associated venous injury in the extremity is common, and the vein should be repaired when possible to reduce local edema and its sequelae. If repair is impossible, the vein should be ligated.

Local heparinization during occlusion is often an important adjunct. Ten milligrams of heparin is diluted in 50 ml of sterile saline and injected into the distal segment after it has been cleared of all clots by use of a Fogarty catheter[9]. The proximal artery is flushed by releasing its occluding clamp, and then a few milliliters of the heparin solution is injected proximally. Prior to completion of the anastomosis, both proximal and distal ends of the artery are flushed, the last few sutures are quickly placed, and the occluding clamps are removed.

A vein patch graft may be used to restore circulation in the traumatized artery[10]. It is usually indicated in the smaller arteries where lacerations have resulted in loss of substance, or in the arteriosclerotic vessel where an increase in lumen size is required and would be completely compromised by simple closure. The saphenous vein is a ready source of vein-patching material.

A false aneurysm or pulsating hematoma develops when bleeding occurs through a partial tear or when the artery is completely severed. The formation of blood clots in this tissue space limits the expansion of the hematoma; subsequently the center of the clot retracts and a pseudo-intima lines the hematoma space. The extravasated blood may first effectively seal the arterial tear, but secondary leaking often occurs, producing a systolic bruit and a thrill.

Closed spaces such as the axillae, groin, or popliteal area will limit the expansion of such a pseudo-aneurysm, but its increasing pressure compresses the veins and may produce nerve damage. The collateral circulation is seriously compromised and the danger of infection is increased. For these reasons a false aneurysm or pulsating hematoma calls for urgent surgical correction, usually accomplished by exposing the artery and suturing the tear.

Arteriovenous Fistula

One of the late complications of untreated vascular injuries is the development of an arteriovenous fistula. The fistula stimulates the formation of both arterial and venous collaterals to a remarkable degree; therefore resection performed from three to six months after the development of an arteriovenous fistula is usually well tolerated. However, if a major vessel is involved, some degree of deficiency in arterial supply will almost certainly be manifested if quadrilateral ligation of the vessels is performed. Therefore, it is always preferable to preserve the main artery and restore arterial continuity. This can be done by end-to-end anastomosis after resection of the fistula, transvenous repair of the fistulous opening, or resection of the fistula with graft replacement. The method of reconstruction depends on the size of the fistula and its location. At times, in small arteriovenous fistu-

las, even the vein may be preserved by suturing.

Fasciotomy

One of the most important adjunctive procedures to insure survival of an extremity after vascular trauma, and at times after arterial repair, is an early fasciotomy. Indications for the procedure are as follows:

1. Massive swelling present preoperatively or developing during the procedure.
2. Presence of a combined arterial and venous injury of major caliber vessels.
3. Associated massive soft-tissue injury.
4. Several hours' delay between injury and primary surgical treatment.
5. Prolonged hypotension or frank shock.
6. Swelling, pain, and discoloration of an extremity following apparently successful surgical restoration of the circulation.
7. Ligation of a major artery or vein to the extremity in the presence of infection or blunt trauma.

In the performance of an adequate fasciotomy, the skin does not have to be incised throughout the entire length of the extremity compartment. Two or three small vertical incisions will allow complete fascial opening with the use of dissecting scissors. There is little danger of causing additional bleeding, and the skin incisions can be closed immediately or left open and closed secondarily. Fasciotomy will not prevent tissue necrosis in every instance and does not preclude surgical repair. It is gratifying to see a limb which is undergoing early pressure necrosis return to viability after a fasciotomy is performed.

Management of Abdominal Vascular Injuries

The rich collateral circulation of the abdominal viscera allows many injured arteries to be ligated without loss of viability of the bowel. Every effort should be made, however, to repair the superior and inferior mesenteric arteries and veins when they are injured.

An injury to the porta hepatis carries a mortality of 50% to 75%. The control of hemorrhage in this area is first accomplished by finger pressure; then, after adequate surgical exposure, non-crushing arterial clamps are applied and the bleeding points secured. If ligation of the hepatic artery is necessary, large doses of antibiotics are advocated postoperatively.

Since an injury to the kidney or renal pedicle may require nephrectomy, a preoperative intravenous pyelogram should be made to assure normal function in the other kidney. If repair of the renal artery is possible, it must be accomplished without constricting the vessel or hypertension may be produced. The patch graft is of value in this type of problem.

An unexplained retroperitoneal hematoma may mean a penetrating wound of the vena cava. Ochsner, Crawford, and DeBakey[11] have cautioned against disturbing retroperitoneal hematomas if the only injury appears to be to the vena cava. Commonly retroperitoneal exploration is mandatory in order to rule out injuries to other retroperitoneal structures which, if untreated, will lead to death. If retroperitoneal exploration is decided upon, preparations for rapid blood replacement should be made and exposure and control of the vena cava above and below the hematoma accomplished before the point of bleeding is approached. The most effective means of immediate control of hemorrhage has been pressure applied with the finger or stick sponge at the site of injury, followed by the application of vascular clamps and suturing of the vena cava. In through-and-through injuries of the cava, a transluminal repair of the posterior laceration through an enlarged anterior venotomy may be the easiest approach[12]. The high incidence of inferior venal caval injuries in association with penetrating wounds of the abdomen has not been generally appreciated. Vena caval laceration occurs about once in every 50 cases of civilian gunshot wounds of the abdomen, and once in every 300 knife wounds.

Vascular Injuries of the Neck and Upper Part of the Thorax

In the neck, an arterial injury is associated with large hematomas which may compress the trachea and cause severe airway

obstruction, necessitating tracheostomy. With the exception of the common and internal carotid arteries, most of the vessels of the upper part of the neck can be ligated without ill effects. The occlusion of these vessels must not be prolonged as irreversible brain damage may result; therefore, a partial occlusion technique or an internal plastic tube shunt should be used in reconstructing these vessels.

For supraclavicular and infraclavicular wounds, adequate exposure of the great vessels in the thoracic inlet and superior mediastinum is essential to repair. Resection of the medial half of the clavicle should be carried out, and if proximal control of the intrathoracic vessels is necessary, the sternum is split and extended into the third or fourth intercostal space.

Traumatic Rupture of the Thoracic Aorta

Traumatic rupture of the thoracic aorta is not necessarily a fatal injury; however, about 80% of the victims die before reaching the hospital[14]. The immediate survivors should all be candidates for successful emergency correction.

The aortic isthmus is the most common site of rupture (80% of the cases), the remaining ruptures (20%) occurring in the ascending aorta. Of the survivors, 82% will die of secondary hemorrhage within three weeks of injury[14]. The triad of crushing chest injury, mediastinal widening, and left hemothorax should suggest the diagnosis. An emergency aortogram performed by pressure injection through a large intravenous catheter inserted into the right atrium, or a catheter passed retrogradely up the femoral artery will demonstrate the rupture. With the circulation maintained by a left atrial to femoral artery bypass with a pump in the circuit, resection of the two ends of the vessel and reconstruction by means of a Dacron graft is the procedure of choice.

Summary

Ligation of major traumatized or bleeding vessels is no longer accepted as the treatment of choice. The indications for exploration of traumatized vessels, and the dangers of expectant therapy are discussed. Some of the special techniques of repair and reconstruction are presented, and the important ancillary procedures used to insure a satisfactory outcome are stressed. Adherence to this plan of primary vessel repair or reconstruction will result in an increase in the salvage of limbs and a decrease in the mortality associated with these injuries.

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* * *

Initital Treatment of Long-Bone Fractures

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Fractures of the extremities are the most common major injuries seen in hospital emergency rooms, and in few other conditions is excellence of treatment so uniformly rewarded by excellence of results. Successful management is the result of an orderly approach, with attention to the various facets of treatment in the order of importance. Before the patient is even seen by the physician, the nurse who calls can report the blood pressure, the state of consciousness, the type of accident, the extremities involved, whether they are crooked or straight, and whether the skin is broken.

The plan of attack is formulated on the way to the emergency room. First, bleeding and shock must be controlled, although shock is not common in these cases unless the injuries are multiple or severely compounded. A closed fracture of the femur may result in the loss of 500-1,000 cc of blood, and a fracture of the pelvis may allow escape of 2,000 cc into the retroperitoneal tissues. The intravenous administration of fluids should be started through a large caliber needle even before the patient is moved to the x-ray department.

Second, the condition of the skin, circulation, and innervation are determined. Loss of arterial circulation is next in importance after control of shock, and must be restored by whatever means are necessary. Supracondylar fractures of the humerus and femur are the principal offenders here, since the brachial and popliteal arteries are impaled by the distal fragments. Usually the circulation can be restored by reducing the fracture, but surgical exploration is sometimes necessary.

Testing the integrity of major nerves in the arm can be simply done. Extending the wrist and fingers tests the radial; spreading the fingers tests the ulna; and closing the fist tests the median. In the leg, the peroneal nerve at the knee is the most frequently injured major nerve and can be tested by having the patient dorsiflex the foot and toes. By far the most common nerve injury is that to the radial nerve in fractures of the humerus. Immediate treatment of this injury is not necessary, but it must be noted before reduction of the fracture is begun.

Injury to the skin may consist of abrasions and lacerations which do not communicate with the fracture and may be dealt with locally. Compound wounds may be only punctures of the skin, but can be identified by their free bleeding, which is really drainage of the fracture hematoma; and flecks of fat may be seen in the blood.

Open fractures should be treated in the operating room and intially require only the application of sterile dressings until x-rays are taken and the operating room made ready. A soft pillow makes an excellent splint while the patient is being move from the emergency room to x-ray and later to the operating room.

Many long-bone fractures can be treated definitively, using local anesthesia, in the emergency room. Five to 10 cc of 1% Xylocaine is injected directly into the fracture hematoma after the skin is prepared fully as carefully as in the operating room. It is helpful to with draw some of the blood from the hematoma before injecting the anesthetic solution as this decreases the swelling and makes it easier to feel the bones during manipulation. When two bones such as the radius and the ulna are fractured, both hematomas must be injected, since they rarely communicate.

Anesthesia is sufficient within five minutes. Heavy sedation with narcotics is used to relax the patient, since it is not possible to overpull even a child's muscle if he tightens up. Movements should be slow and gentle, and preliminary traction with an assistant providing counter traction for two or three minutes make the reduction easier. A plaster cast is applied over padding in the usual manner. If post-reduction films show poor position, the cast may be removed and

the procedure repeated, as the anesthesia will last two hours.

Most fractures of the wrist, ankle and clavicle, and even some fractures of the tibia, can be treated definitively under local anesthesia in the operating room. The common fracture of the neck of the fifth metacarpal requires forceful manipulation, and excellent anesthesia for this procedure can be obtained by blocking the ulnar nerve at the elbow.

Open fractures of the fingers with extensive skin, nerve, and tendon injuries require major operative treatment. A common injury consists of partial amputation of a finger in the distal or middle phalanx. Stability of the fracture can be maintained by pushing a 20-gauge disposable needle through the finger tip across the fracture line into the proximal fragment. The needle is removed a week or two later when the wound is dressed. Using a needle in this manner is simple and safe, and can be done by the surgeon wtihout assistance.

Some long-bone fractures can be treated without anesthesia, in the emergency room. Greenstick fractures of the forearm are best straightened by a single quick movement which reverses the deformity and fractures the opposite cortex. The arm is then held in a neutral position for a few seconds and a cast is applied. This maneuver is successful if done before the patient is aware of it. It should be completed on the first attempt, particularly if the patient is a child, as he will not allow a second mainpulation without anesthesia. The pain lasts only a few seconds and is a small price to pay to avoid the hazards of general anesthesia. It is important to break the opposite cortex, as displacement will recur even in a cast if the arm is simply straightened and placed in a cast.

A few fine points of technique are worth mentioning. All fractures produce swelling, and the more severe the fracture and vigorous the manipulation, the greater the swelling. Swelling generally reaches its maximum in 24 hours, a fact to remember when applying casts. A tight cast produces a severe throbbing pain and may lead to ischemic necrosis, but more often it produces swelling which leads to permanent stiffness in the fingers and toes. It is wise to inspect all fractures on the day following reduction.

The old rule of immobilizing a joint above and a joint below the fracture is still a good one, but we still see tibial fractures treated with a short leg cast and forearm fractures treated with a below-elbow cast. Rarely is an arm cast applied with the elbow extended, but leg casts are often wrongly applied with the knee extended. The knee must be flexed in a long leg cast to prevent rotation at the tibial fracture site. A simple way to get the proper position with only one assistant is to have the patient move very close to the edge of the table so that the injured leg hangs off the table from the hip downward. The knee will automatically assume the desired amount of flexion. The foot must be held at a 90-degree angle to the leg by an assistant and not allowed to dangle in plantar flexion. What a tragedy to have a fractured tibia heal after three months in a cast and then discover that the patient is unable to walk because he cannot get his heel on the floor!

In treating fractures of the forearm, always trim the cast back to the distal palmar crease to allow free motion at the metacarpophalangeal joints. Stiff fingers are a far more common cause of disability than malunited fractures.

Summary

To summarize the intial treatment of long-bone fractures, remember to approach treatment in an orderly fashion, doing the most urgent things first.

1. Control shock.
2. Restore arterial circulation.
3. Look for nerve injuries.
4. If an open wound is present send the patient to surgery.

In many fractures the initial treatment can be the definitive treatment and often can be carried out in the emergency room, using local anesthesia. Attention to the rules of plaster technique will prevent many later disabilities. Never neglect a complaint of a tight cast.

Management of Urinary Tract Injuries

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Injuries to the kidney are seldom difficult to diagnose. They usually result from a direct blow to the flank or side and may occasionally be of the contrecoup type, wherein the kidney opposite the site of impact is injured. In the absence of gross hematuria, it is virtually assured that renal injury has not occurred.

When, as judged by excretory pyelography, the renal capsule remains intact following a renal injury, no treatment other than an attempt to alleviate symptoms is required. Placing the patient on bed rest and under observation for several days will allow the physician to be absolutely certain that his original impression of contusion was correct.

Surgical drainage is usually recommended when extravasation of blood and urine outside the confines of the renal capsule is evident. This helps to shorten the patient's convalescence and will prevent the troublesome sequelae which are apt to occur years after failure to drain a perirenal hematoma. The most prominent of these late complications are perirenal cyst formation, ureteropelvic junction obstruction as a result of scarring, and occasionally compression atrophy of the kidney as the result of capsular fibrosis.

Emergency operation is rarely indicated except in the unlikely event of injury to the renal vascular pedicle, with resultant uncontrollable hemorrhage and shock.

Two situations involving renal injuries are worthy of specific note. The first is the occasional incident where the surgeon, on exploring the abdomen for splenic rupture, finds instead a large retroperitoneal hematoma representing an injured kidney. It is best to resist the temptation to explore the ruptured kidney at this time, for to do so would assuredly necessitate nephrectomy. The renal fascial envelopment offers a good tamponading effect in renal injuries except in cases of the most severe vascular damage. One should wait several days before exploring the damaged kidney. By then the fascial tamponade would have caused fresh bleeding to cease, the remaining viable tissue would be easily recognizable, and conceivably a significant portion of the damaged kidney might be salvaged.

The second situation is the possiblity of pre-existing renal disease when renal symptoms are disproportionately severe following a seemingly minor injury. This is particularly true in children. It is not unusual for renal tumors to be recognized for the first time in this situation.

Injuries from External Forces

The ruptured urinary bladder constitutes a surgical emergency. If the nature of the injury makes one suspect this condition, the diagnosis is easily established by obtaining a cystogram, using a nonirritating opaque medium. Any dye seen beyond the confines of the bladder would indicate a rupture. Whether this rupture is intra- or extra-peritoneal is an academic question, for the treatment is the same in either case. Drainage by cystostomy is imperative. Actual repair of the rent is not absolutely necessary, but if the patient's general condition permits, his convalescence may be shortened thereby. Urethral catheterization and drainage is advisable in conjunction with cystotomy drainage.

Urethral injuries are often associated with pelvic fractures, and may also result from straddle injuries when the urethra is crushed between the inferior pubic ramus and the object on which the victim falls. These injuries may be distal to the external urethal sphincter, in which case blood will be seen escaping from the urethral meatus without relation to urination; or they may be proximal to the sphincter, usually rendering the patient unable to void as well as making it impossible to place a catheter in the urethra. This type of rupture can be confirmed by rectal examination. The prostate is not found in its usual location, but appears to

be much higher in the pelvis, having been literally sheared away from its mooring at the level of the membranous urethra.

The absolute minimum in treatment of urethral injuries should include suprapubic cystostomy and urethral intubation. It is sometimes difficult to place a catheter into the urethra, but with the bladder open it can usually be managed by manipulating the catheter or sounds or both from each end of the urethra. After proper placement, each of the two catheters serves a different purpose. The suprapubic catheter is primarily for drainage; the urethral, primarily for splinting the injured urethra.

Whenever the patient's condition permits, one should always make an effort to repair the urethral injury directly. This, in addition to promoting healing and shortening convalescence, will go far toward preventing troublesome urethral strictures, which all too often form as a result of this type of injury and plague the patient for years thereafter.

Testicular Torsion

Although technically not an injury, testicular torsion is perhaps best discussed under this heading since it requires immediate recognition and surgical correction if the test is to be saved. The condition is usually confused with acute epididymo-orchitis, so-called traumatic orchitis, and inflammatory hydrocele, none of which ordinarily requires surgical intervention. Torsion of the testis most often occurs in adolescence and early adulthood, and usually during physical activity requiring a sudden change of direction of motion. The individual is suddenly seized with pain in the groin, and swelling of the affected scrotal compartment rapidly ensues. Often the patient fails to seek help until it is too late for corrective surgery. Unfortunately the physician is sometimes responsible for not recognizing the true nature of the problem before it is too late to institute effective treatment.

Injuries Attributable to Internal Forces

The foregoing summary has dealt with the major genitourinary injuries resulting from external forces only. This leads to a consideration of the urinary tract injuries which result from internal forces. Anyone who has ever wielded a scalpel, cystoscope, or catheter, with or without a stylet, will understand the nature of these forces. It is difficult, if not impossible, to categorize the wide range of injuries that may result. They include fistulas so rare that their names are virtually unpronounceable, and even some that are as yet unnamed. These forces have been known to cause a rectourethral fistula from a "simple" catheterization with a stylet. Fatal hemorhage from a renal artery perforation during "simple" ureteral catheterization has also been known to occur, to mention two of the less common injuries attributable to internal forces.

Any one who performs abdominal operations will at one time or another come to grips with this problem. When the inevitable occurs, it might be well to heed the old expression concerning the itch: *It's no disgrace to have it; it is a disgrace to keep it* (not treat it).

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Founding Editor (1940-1963)

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SEPTEMBER, 1965

MEDICARE IS THE LAW

At the 1962 Annual Meeting of the Medical Society's House of Delegates in Raleigh, the King-Anderson Bill, then pending in the Congress, inspired the introduction of three resolutions proposing non-participation in the event of passage of the bill. Now that expanded and more complex legislation is, in fact, the law of the land, voices of non-participation will again be stirred. There is little chance that any organized boycott of the Medicare program will materialize or that individual non-participation will become widespread. A choice of non-participation must inevitably disrupt longstanding physician-patient relationships or, what is more important, incur the risk that needed medical care may be delayed or denied.

Accepting and obeying the law need not still the voice of protest or curtail the effort to alter the system. It is the privilege of the physician to serve the community, but it is his obligation to avoid subservience and to exercise his best judgment under specific circumstances. Is it not also the physician's obligation to concern himself with the forces that presume to cut the patterns of medical practice?

J. S. R.

* * *

KIDNEY TRANSPLANTATION IN NORTH CAROLINA

In this issue of the JOURNAL, report is made of the initiation of an organ transplantation program in one of the medical centers of our state. The cautious enthusiasm expressed in this report is based upon careful assessment of the manifold aspects of the problem of kidney transplantation in particular and organ transplantation in general.

The ambition to successfully transplant organs or tissues from one individual to another is not new, and indeed kidney transplantation was effected over a half century ago by Alexis Carrel. Since then, homotransplantation of some tissues—cartilage, bone, and cornea—has become relatively routine and is now a part of standard medical practice. However, with respect to viable tissues and organs, many of the problems which originally confronted transplantation surgeons persist today.

Technical advances in urologic and vascular surgery render the actual transplantation procedure relatively safe and effective. The development and improvement of hemodialysis and the availability of skilled personnel in this field have made the preoperative medical management more effective. Nevertheless, serious problems of tissue incompatibility still exist, and the major transplantation effort now being undertaken in our medical community has properly focused attention upon the immunologic aspects of the problem.

The development of donor-recipient tissue-matching techniques promises to make

it possible to select from among available donors the most appropriate tissues for the recipient. It may be hoped that such selection will permit reduction in dosage of immunosuppressive drugs and steroids, perhaps ultimately permitting acceptance of grafts without the potential complications of these rather hazardous agents.

Human renal transplantation requires the coordinated effort of an experienced team of vascular and urologic surgeons, internists, and immunologists. A great deal of information can be gained through a restrained research approach to the immunologic and functional aspects of kidney transplantation, and the advent of such an effort can be welcomed by North Carolina medicine.

JAMES F. GLENN, M.D.

* * *

SIC TRANSIT GLORIA SIMILIS

Although little used, the term "accoucheur's hand," or "obstetrician's hand," has been used to describe the characteristic appearance of the hand in tetany. Gould's medical dictionary describes it thus: "The hand is flexed at the wrist, the fingers at the metacarpophalangeal joint but extended at the interphalangeal joints, the thumb being strongly flexed into the palm." This is a curious simile, since the obstetricians hereabouts are not prone to tetany; the hand position which characterizes their specialty today appears in the dictionary as the "benediction hand," described as "a hand in which the ring and little fingers are flexed, the thumb and other two fingers remaining normal: seen in ulnar paralysis and syringomyelia."

If we exchange, at face value, "accoucher's hand" for "benediction hand," what simile will we use for the vacated accoucher's hand? Any experienced television watcher can offer one: It is the characteristic pose of the announcer demonstrating a tube of tooth paste, hair lubricant, or similar small package, the material keeping the tetanic thumb and fingers from getting to the position which characterized the disease in prior years.

Medical similes need constant revision—of what use is "weaver's bottom" now that Silas Marner is no more? The modern weaver is more subject to depression over automation. One could extend the list greatly—and it is fun to do so.

* * *

MASS CASUALTIES

Despite intensive educational efforts by both government and organized medicine, awareness of mass casualty problems is difficult to obtain and maintain. The number of casualties which constitutes a "mass" varies according to who and what is at the receiving end, and for an individual physician alone in a hospital emergency room, three seriously injured people is already too many.

In this issue of the JOURNAL is a group of papers on trauma, including one on mass casualties. In another symposium on trauma, published more than six years ago, Drs. Marsten and Shaffner reviewed their experience with a school fire ("Hospital Disaster Planning and the Flat Rock School Fire," vol. 20:27-33, Jan. 1959). To judge by local and distant responses to our previous material on this problem, interest will be considerable. All our readers are urged to give the matter thought. None of us, no matter how far removed from such problems under ordinary circumstances, is exempt from involvement.

* * *

WHODUNIT?

Enough questions are raised about who writes our editorials to call for a written explanation. Guest editorials bear the full name of their writer. Contributions from the editorial board and the associate editor bear the initials of the author. The editor's efforts are unsigned.

The writing of this clarification was prompted by the wish of a reader to let the proper person know that in our editorial "Jargon in Sports Injuries" (June, 1965), the term "skin splints" which appeared should have been "shin splints." The information was passed on to the printer. Apparently the ball players at State don't suffer from this painful affliction, all too common here in Winston-Salem.

The President's Page

WHAT MEDICARE MEANS TO US

Twenty years ago President Harry S. Truman said that the "benefits of modern medical science have not been enjoyed by our citizens with any degree of equality—Nor will they be in the future—unless Government is bold enough to do something about it." At that time he called for the immediate enactment of a five-point medical care program with a revolutionary—for the United States—proposal for medical insurance under Social Security.

The program stirred strong and durable opposition, particularly from the American Medical Association of which we are a part. We contended then, as we do now, that the idea will lead to the "socialization of medicine." Our efforts towards resistance were successful for 20 years, but in that period we have seen a revolution of a social nature progress towards its goal with an irreversible trend. Our program of "Eldercare", which has considerable merit, was presented too late for serious consideration. Now we have witnessed the enactment into law of a plan for Federal health insurance which has become known as "Medicare."

Even though Mr. Truman asked for a more far-reaching program to provide coverage for all Americans, the new medicare program, limited to persons over 65, must be looked upon as a monumental beginning. We must recognize the trend of the times and expect efforts to eventually broaden the program to include coverage under such provisions for everyone from "the womb to the tomb." It is my feeling that we should cooperate with and live within the laws of our land. We also have the continued responsibility to work towards revision of laws and the enactment of new legislation which we think are in the interest of the people we serve. This can be done through existing channels which provide for orderly, legally supported maneuvers which can gain the ear—not necessarily sympathetic but amenable to persuasion—of the electorate and the legislators.

It would seem appropriate that the pages of this Journal record for posterity a recognition of this far-reaching legislation and speak briefly of its two major provisions:

(1) *Basic Coverage* which is financed by Social Security provides: *hospitalization*—up to 90 days for each illness with the patient paying the first $40,00 and after 60 days, an additional $10.00 daily; *nursing home care*—up to 100 days after at least three days in a hospital with the patient paying $5.00 daily after 20 days; *home nursing*—up to 100 visits a year after discharge from a hospital or nursing home; *outpatient tests and diagnosis*—services other than those provided by physicians with the patient paying the first $20.00 and 20 per cent of the remainder.

(2) *Voluntary Supplementary Coverage* which is financed by $3.00 monthly premiums in addition to Federal funds and would extend coverage to doctor's fees as well as other health services and supplies. The patient would pay the first $50.00 of his annual costs and 20 per cent of the remainder.

To finance all the new provisions which also call for an average 7 per cent rise in the regular cash benefits currently being paid, the Social Security taxes for employees and employers will be progressively increased, starting next January from the current 3.625 per cent to 5.65 per cent. The rates now apply only to the first $4800 of an employee's annual pay; beginning in 1966 they will apply to the first $6,600. All of us know that this means virtually nothing in the way of "insurance" for the self-employed practicing physician.

It further appears timely that the membership be given information in reference to several potential implications relative to the Social Security Amendments of 1965, now Public Law 89-97, including medical assistance for the aged.

The American Medical Association's Board of Trustees held a special session on August 7-8 to discuss Public Law 89-97 and related matters. Since the Medicare Bill has become law, the Board feels that its role

should be to give advice and guidance to the Secretary of Health, Education and Welfare to the end that programs developed and regulations promulgated will provide the stated benefits in the most meaningful manner to our patients with a minimum of disturbance and inconvenience to the medical profession. An Advisory Committee has been appointed to consult with HEW officials regarding implementation of the law. Its recommendations will be regularly reported to the Board of Trustees and through the Board to the House of Delegates and other appropriate groups. The President and HEW asked the AMA to participate in formulation of regulations and has given assurances that no regulations would be finalized without full AMA opportunity to evaluate and recommend changes.

The following is a summary of the items discussed by Legal Council at the meeting of the Board of Trustees in Chicago on August 19, 1965.

1. Physicians acting alone or as a group through their medical organizations may freely criticize Public Law 89-98 and may seek its repeal or modification.

2. An individual physician acting independently and not in concert with others can lawfully refuse to accept any person as a patient who is a beneficiary under the program.

3. The physician's right to practice in a hospital is not vested; he is obligated to abide by the reasonable rules and regulations imposed by the hospital administration. Such rules and regulations may directly or indirectly require the cooperation of the physician in assisting the hospital to participate as a provider of services under the law.

4. Although Public Law 89-97 provides that nothing in this law "shall be constructed to authorize any Federal officer or employee to exercise any supervision or control over the practice of medicine or the manner in which medical services are provided," other laws, such as the Sherman Antitrust Act, may apply to certain situations involving group action.

5. The basic principle of antitrust laws is to prohibit private restraints which operate to impede a competitive economy; and action by an organized group of individuals in refusing to deal with others has been held illegal. When restraints adversely affect those engaged in providing health services, such as hospitals, nursing homes and carriers, relief may be provided by law. The Sherman Antitrust Act delegates to the courts broad powers to interpret and apply the prohibitions of the law, case by case, in civil and criminal actions brought by the Department of Justice and by private persons.

6. Conspiracy under the antitrust laws may emanate from a common understanding or an express or implied agreement. In a number of cases involving medical organizations, statements of policy by the organization, such as resolutions and "ethical" rules of conduct, have been interpreted as evidence of conspiracy under the particular facts and circumstances.

7. If physicians acting in concert through medical organizations refuse to participate in the program, such action would involve exposure to the application of the Sherman Antitrust Act.

The above information is worthy of prolonged consideration. We certainly have not heard the last of it. Doctors will continue, I believe, to render service where their particular skills are needed. I think our profession will maintain the tradition of providing care for all age groups regardless of their ability to pay when the need is evident. I recognize the individual doctor's right to accept or reject a patient and the patient's free choice of the physician he asks to care for him. I would hope that those particularly involved (those 65 or older) under this new legislation can be made to know that the privileges they now enjoy are not without limitations and that they will not attempt to abuse them.

GEORGE W. PASCHAL, JR., M.D.
President

Correspondence

PROJECT HEAD START

To the Editor:

Enclosed is a communication dealing with Project Head Start, the nationwide program now underway for pre-school children from low-income families. The article emphasizes the solid foundation on which the program rests and includes pertinent facts and figures relating to the activities in your state.

We think you will agree that the story is a unique one with considerable interest for your readers, reporting on a massive three-way attack on the poverty problem from the standpoints of education, public health and social welfare.

Further information and specific details as to local projects within the state may be obtained from the sources listed below.

Holmes Brown
Director of Public Affairs
Office of Economic Opportunity

Mr. James White, Coordinator
Economic Opportunity Program
130 E. Morgan Street
Raleigh, North Carolina
Mrs. Betty Ellingson
OEO
Washington, D. C. 20506

* * *

Thousands of physicians, on the community level and in state and national associations across the country, are taking part this summer in the important medical aspects of Project Head Start, the War on Poverty's program for pre-school children from low-income families.

In North Carolina more than 26,000 children have been registered in Child Development Centers located in schools, churches and community buildings in both urban and rural areas. More than 1000 professional and volunteer workers are carrying out a unique and massive program to help prepare these youngsters to enter local school systems this fall.

North Carolina is contributing some $500,000 of the 4.6 million total cost, the Office of Economic Opportunity furnishing the balance to rent facilities, train and pay doctors, teachers and social workers participating in Project Head Start.

Head Start represents the first major attack on the nation's poverty problem through an attempt to give pre-school children of the poor a chance to catch up with their contemporaries *before* kindergarten or first grade and thus reduce the chances of a first-grader becoming "drop-out material."

A three-way program directed at the "whole child" and comprising medical examinations and care, social services for him and his family, and a pre-school educational program based on accepted principles was drafted by Head Start's Planning Committee, chaired by Dr. Robert E. Cooke, Chief of Pediatrics at Johns Hopkins University. Other physicians on the committee are: Dr. Edward Perry Crump, Professor of Pediatrics at Meharry Medical College, Nashville: Dr. Edward Davens, Deputy Commissioner, Maryland State Department of Health; Dr. Reginald Lourie, Director Department of Psychiatry, Children's Hospital, Washington, and Medical Director of the Hillcrest Children's Center, also in Washington. Program Director is Dr. Julius B. Richmond, Dean of the Medical Faculty of the State University Upstate Medical Center, Syracuse, N. Y.

Emphasis on Health

Primary emphasis on health is due to the high incidence of physical defects customarily found in under-privileged children. About one-third of the 1,000,000 children from low-income families who will enter kindergarten or first grade are poorly prepared for school, and unless they receive special help they are destined to fall further and further behind their more fortunate classmates.

Medical statistics are expected to show that 90% have never had a physical examination; partial blindness will be found in 4% and some eye trouble in another 15%; 10% will have hearing difficulties and as many as 50% will have no record of immunization against diphtheria or tetanus. A number of active cases of tuberculosis and many, many contacts will probably be discovered during the examinations.

WHEN MOTHER'S IRON ISN'T UP TO MOTHERHOOD

IN BRIEF: ACTIONS AND USES: A single dose of Imferon (iron dextran injection) will measurably begin to raise hemoglobin and a complete course of therapy will effectively rebuild iron reserves. The drug is indicated only for specifically-diagnosed cases of iron deficiency anemia and then only when oral administration of iron is ineffective or impractical. Such iron deficiency anemia may include: patients in the last trimester of pregnancy; patients with gastrointestinal disease or those recovering from gastrointestinal surgery; patients with chronic bleeding with continual and extensive iron losses not rapidly replenishable with oral iron; patients intolerant of blood transfusion *as a source of iron;* infants with hypochromic anemia; patients who cannot be relied upon to take oral iron.

COMPOSITION: Imferon (iron dextran injection) is a well-tolerated solution of iron dextran complex providing an equivalent of 50 mg. of elemental iron in each cc. The solution contains 0.9% sodium chloride and has a pH of 5.2-6.0. The 10 cc. vial contains 0.5% phenol as a preservative.

ADMINISTRATION AND DOSAGE: Dosage, based upon body weight and Gm. Hb./100 cc. of blood, ranges from 0.5 cc. in infants to 5.0 cc. in adults, daily, every other day, or weekly. The total iron requirement for the individual patient is readily obtainable from the dosage chart in the package insert. Deep intramuscular injection in the upper outer quadrant of the buttock, using a Z-track technique, (with displacement of the skin laterally prior to injection), insures absorption and will help avoid staining of the skin. A 2-inch needle is recommended for the adult of average size.

SIDE EFFECTS: Local and systemic side effects are few. Staining of the skin may occur. Excessive dosage, beyond the calculated need, may cause hemosiderosis. Although allergic or anaphylactoid reactions are not common, occasional severe reactions have been observed, including three fatal reactions which may have been due to Imferon (iron dextran injection). Urticaria, arthralgia, lymphadenopathy, nausea, headache, and fever have occasionally been reported. Initial test doses of 0.5 cc. are advisable.

PRECAUTIONS: If sensitivity to test doses is manifested, the drug should not be given. Imferon (iron dextran injection) must be administered by deep intramuscular injection only. Inject only in the upper outer quadrant of the buttock, not in the arm or other exposed area.

CONTRAINDICATIONS: Imferon (iron dextran injection) is contraindicated in patients sensitive to iron dextran complex. Since its use is intended for the treatment of iron deficiency anemia only, it is contraindicated in other anemias.

CARCINOGENICITY POTENTIAL: Using relatively massive doses, Imferon (iron dextran injection) has been shown to produce sarcoma in rats, mice and rabbits and possibly in hamsters, but not in guinea pigs. The risk of carcinogenesis, if any in man, following recommended therapy with Imferon (iron dextran injection) appears to be extremely small.

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imferon®

(iron dextran injection)



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Finally, the examinations are expected to reveal 5% of the children with nutritional deficiencies and 2% mentally retarded.

The significance of these statistics is well known to pediatricians, but not to the lay public, unaware, for example, that the millions of measles cases each year *can* cause lung and brain damage to children living under poor conditions and suffering from a lack of proper care.

To help meet this challenge, professional associations like the American Academy of Pediatrics, American Psychiatric Association, American Dental Association, American Nursing Association, American Optometric Association and the American Speech and Hearing Association have offered the services of their membership. The American Optometric Association as well as the National Society for the Prevention of Blindness is training volunters to conduct visual screening examinations preliminary to the more thorough examinations by the doctors.

Head Start's medical examination will be the first for a great majority of the 500,000 children enrolled in the program.

"Specialists in child care have realized," said Dr. Richmond, "that the development of the child does not unfold automatically; rather it is dependent upon adequate health supervision and tender, stimulating care."

The Critical Years

Fundamental to Head Start is the belief that the early childhood years are the most criticial point in the "poverty cycle", a period when the creation of learning patterns, emotional development and the formation of individual expectations and hopes take place at a rapid pace. For the child of poverty there are early observable deficiencies in these processes which lay the foundation for a pattern of failure—and thus a pattern of poverty—during his entire life.

Sufficient research has been accomplished to make clear that the pre-school years are important in offering an opportunity to break the "poverty cycle" and, through the child, to gain access to the family and its problems. It is equally clear that a successful program of this kind must be inter-disciplinary, involving activities generally associated with the fields of social service and education as well as health.

Recognition of this is seen clearly in a joint statement of the US Commissioner of Welfare and the US Commissioner of Education, issued on January 6, 1965; "Adequate care and protection of children in day care must combine the services of *health, education and welfare*—services fundamental to the growth and development of the child."

The medical examination, important though it is, constitutes only the first phase of the medical activities of Head Start. Equally important is the referral of children to community facilities for indicated treatment and a follow-up by a public health nurse or social worker to make sure that the recommended steps have indeed been taken. In many cases, families are unaware of the existence of free health services in their community.

To assist in evaluating this broad program, the American Academy of Pediatrics, through its state chapters, is offering appraisal services. Similar cooperation is being extended by medical school faculty members throughout the country.

Each medical consultant was asked to visit several Child Development Centers in his area, review the medical services and suggest improvements. In certain situations, he was requested to help a Center or sponsoring agency with a special problem in developing pediatric care. Corresponding appraisals by specialists in the field of preschool education will also aid in assessing the program's effectiveness. In all cases, however, remedies depend on local community action to improve or correct situations uncovered by the consultants.

Apart from the sheer size of the effort (an anticipated 100,000 registrations quickly grew to five times that number), an unusual feature is the participation of the parents in their children's activities. Parents work in the program as aides, help in program planning and many non-professional jobs, depending on their availability and special aptitudes or interests. An important objective is to educate the parents to the need as well as the existence of local health services.

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often relieves mental pain in 2-5 days

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Indications: In depression of any kind—neurotic and psychotic depressive reactions; manic-depressive or involutional psychotic reactions.

Contraindications and Precautions: Glaucoma, urethral or ureteral spasm, recent myocardial infarction, severe coronary heart disease and epilepsy. Should not be given within two weeks of treatment with a monoamine oxidase inhibitor. Safety in human pregnancy has not been established.

Adverse Effects: Side effects, usually mild, may include: dry mouth, constipation, dizziness, palpitation, delayed urination, "bad taste," sensory illusion, tinnitus, agitation and stimulation, sweating, drowsiness, headache, orthostatic hypotension, flushing, nausea, cramps, weakness, blurred vision and mydriasis, rash, allergy, transient eosinophilia, granulopenia, altered liver function, ataxia and extrapyramidal signs.

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A new program, Head Start is building on a solid foundation which has existed for many years, although past school-centered programs have been available only to small numbers of children. One over-riding fact underlies both the new and the old: children are children. The fundamental patterns of development and the fundamental needs are human. Within this frame, some differences exist.

The new program serves children bringing with them more than their share of hurts from the past, so that working with them in small groups has seemed especially important. Children from low-income families are also likely to have more need for comprehensive medical, psychological and welfare services; therefore access to these resources is important.

Head Start, rising on a solid basis of knowledge and accepted doctrine, represents, in the words of the Planning Committee, "an immediate and massive intervention in the poverty cycle."

Bulletin Board

COMING MEETINGS

Bowman Gray School of Medicine, Symposium on Neurology for the Practicing Physician—Winston-Salem, October 7-8.

Fifth District Medical Society Meeting—Mid Pines Club, Southern Pines, October 8.

North Carolina Rural Health Conference—Memorial Auditorium, Raleigh, October 9.

North Carolina Society for Crippled Children and Adults, Annual Meeting—Kings Inn, Greensboro, October 15-16.

North Carolina Academy of General Practice, Annual Meeting—Jack Tar Hotel, Durham, October 31-November 2.

North Carolina Pediatrics Society, Annual Meeting, Mid Pines Club and Golfotel, Southern Pines, November 5-6.

Committee on Injuries of the American Academy of Orthopaedic Surgeons in conjunction with Duke University School of Medicine 12-day, Postgraduate Cruise Course on Fractures and Other Injuries—MS Europa sailing from New York March 14, 1966, visiting the West Indies. (Allen Travel Service, Inc., 565 Fifth Avenue, New York.)

North Carolina Obstetrical and Gynecological Society—Mid Pines Club, Southern Pines, April 22-24, 1966.

New Members of the State Society

Drs. Earl Parks Welch, Jr., S, Professional Bldg., Winston-Salem; Thomas LaFayette Griffin, U, Carolina General Clinic, Wilson; Donald Kai Wallace, I, 1040 Inverness Rd., Southern Pines; William Madison Satterwhite, Otol, Forsyth Medical Park, Winston-Salem; Oscar Grogan Hairston, S, 562 N. Patterson Ave., Winston-Salem; Russell Lee Smith, 114 E. 3rd St., Winston-Salem; Lloyd Harvey Robertson, U, 1 North Rd., Salisbury; Jimmie Lee Harris, GP, Prof. Bldg., Winston-Salem; James Preston Green, GP, 666 Vance St., Henderson; Parnell Napoleon Avery, 128 S. Elizabeth St., Henderson.

News Notes from the University of North Carolina School of Medicine

A new chairman of the Department of Medicine in the School of Medicine has been named at the University of North Carolina.

Dr. Louis G. Welt, professor of medicine and a member of the UNC faculty since 1952, has been appointed to fill the post formerly held by Dr. Charles H. Burnett who is on an extended leave of absence due to illness.

A graduate of New York University and Yale University School of Medicine, Dr. Welt was assistant professor of medicine at Yale for three years before coming to Chapel Hill. He received a U. S. Public Health Service Research Career Award in the fall of 1963.

He became project director last year for a five-year research study designed to try to find out if a patient who is seriously ill with poorly functioning kidneys can have his life comfortably prolonged by repeated treatments with an artificial kidney machine.

* * *

A key official was named recently in a major, top-level reorganization of the administrative structure approved last month at UNC.

Dean J. Carlyle Sitterson, who assumed the newly created office of vice chancellor of the university on July 1, announced the appointment of Dr. George P. Manire as assistant vice chancellor for health affairs.

Dr. Manire, a professor of bacteriology and immunology at the UNC School of Medicine, joined the faculty in 1950.

The new appointment is a phase of the reorganization plan designed to increase cooperation between the Division of Academic Affairs and the Division of Health Affairs. Both divisions now are under a single top-level administrator.

* * *

The University of North Carolina at Chapel Hill has received a quarter million dollar federal grant to help establish a center for population studies.

the price of "success"

190/102

Hypertension has been called the price of success... and in some life-situations, the cost of failure. In either event, Metatensin lowers blood pressure, cushions the patient against stress and retards the progress of disease. Metatensin is effective and economical. It is well-tolerated over long periods.

THERAPY YOU CAN STAY WITH

METATENSIN®

EACH SCORED TABLET CONTAINS:
Metahydrin® (trichlormethiazide) 2 mg. or 4 mg. Reserpine 0.1 mg.

In Brief: Patients with hepatic cirrhosis or diarrheal syndromes, or under therapy with digitalis, ACTH, or potassium-losing steroids, should be observed for signs of hypokalemia. With thiazides, electrolyte depletion, diabetes, gout, granulopenia, nausea, pancreatitis, cholestatic jaundice, flushing, mild muscle cramps, constipation, photosensitivity, acute myopia, perimacular edema, paresthesias, neonatal bone marrow depression in infants of mothers who received thiazides during pregnancy, skin rash or purpura with or without thrombocytopenia, may occur. With reserpine, untoward effects may include depression, peptic ulcer and bronchial asthma. Withdraw medication at least 7 days prior to electroshock therapy, 2 weeks prior to elective surgery. Contraindications are complete renal shutdown, rising azotemia or development of hyperkalemia or acidosis in severe renal disease.
Supplied: Metatensin tablets, 2 mg., 4 mg. — bottles of 100 and 1000.

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UNC is one of the first two major universities in the U. S. to reecive such a grant. Other universities are being considered.

The Agency for International Development (AID) in the U. S. State Department has approved $267,984 over a three-year period to provide a staff to teach short courses, seminars, workshops and graduate degree programs and to provide consultation services to U. S. and foreign agencies interested in developing population control programs.

A UNC Population Studies Committee, headed by Dr. John B. Graham, professor of pathology at the Medical School, is composed of members representing such areas as vital statistics, demography, family planning, social sciences, genetics, program planning and administration.

* * *

In recent personnel actions affecting the School of Medicine, UNC trustees approved promotions, appointments, leaves of absence, and resignations.

Upon recommendation of Chancellor Paul F. Sharp, the following change in status was approved:

Dr. George P. Manire, professor of bacteriology and immunology, to assistant vice chancellor for health affairs.

Faculty members were promoted as follows: Dr. Mary G. Clarke, Department of Psychiatry, to full professor; Dr. Irving I. Gottesman and Dr. Paul A. Obrist, psychologists in Department of Psychiatry, Drs. Oscar LeM. Sapp, III, and Richard I. Walker, Department of Medicine, Drs. John L. Simmons, Department of Surgery, and Dr. Rex W. Speers, Department of Psychiatry, to associate professor; and Fred W. Reid, hospital administration and hospital chaplain, and Dr. Benson R. Wilcox, Department of Surgery, to assistant professor.

Dr. Lloyd Robert Yonce, Department of Physiology, was granted a leave of absence to engage in research in Sweden. Two resignations were accepted: Dr. Charles Louis Johnston, Jr., Department of Physiology, to accept a position at the Medical College of Virginia, August 31; and Dr. Arthur L. Finn, resigned before reporting for duty.

Special tribute was paid to two native Tar Heels at the National Library of Medicine Centennial in Washington, D. C., recently.

Dr. Warner L. Wells, surgeon and associate professor in the UNC School of Medicine, and Dr. Worth B. Daniels, now of Washington, D. C., and brother of Jonathan Daniels of Raleigh, were recognized for their services as chairmen of the Board of Regents of the National Library of Medicine.

In a centennial keynote address, Senator Lister Hill of Alabama said the library has achieved the goal of "a truly great medical library" through the efforts of such men as Dr. Daniels, the first chairman of the Board of Regents, and Dr. Wells, who served as chairman in 1962-63.

The National Library of Medicine is the world's largest depository of biomedical literature.

* * *

Seventy-six new physicians have joined the house staff of N. C. Memorial Hospital here for advanced medical training. Thirty-seven received their medical degree this year and are here for one year of internship training in Chapel Hill. Thirty-nine have completed their internships and are continuing their training in medical specialties. These are the residents.

The newcomers to Memorial's house staff raise the total number of interns and residents now at the hospital to 181.

The hospital also has twenty-three fellows and two trainees in special medical training.

In addition to the physicians, three psychology interns have joined the hospital for one year of training.

The training of physical therapists in the care of pediatric patients—"damaged children"—will be stepped up at the UNC School of Medicine with a five-year federal grant which will total about $180,000.

The Children's Bureau of the U. S. Department of Health, Education and Welfare recently approved $26,179 for the first year of the program, effective July 1.

This is the first and only grant of its kind to a school of physical therapy.

Margaret L. Moore, director of the UNC Curriculum in Physical Therapy, is the project director, and Carolyn B. Ware, UNC instructor in physical therapy, is the project coordinator.

* * *

The state's first on-the-job training program for operating room technicians turned out another group of graduates on July 13.

Certificates were awarded recently to four more trainees who have completed the 16-week course at N. C. Memorial Hospital.

The training program is being conducted under a one-year contract with the U. S. Labor Department. It is designed to train the unemployed and underemployed to meet a critical need for more operating room technicians.

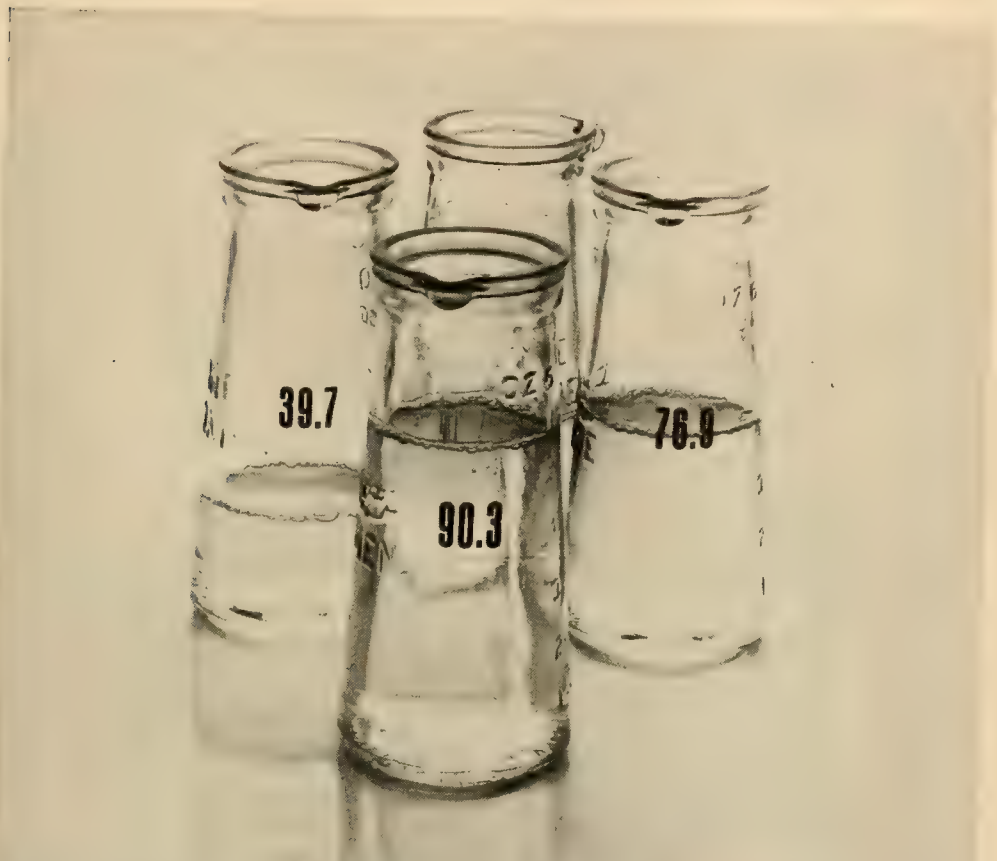
Trainees are given instruction and experience which equips them to become members of the surgical team. They are prepared to assist surgeons in routine and emergency procedures.

Applications for future classes may be made with the Personnel Office, N. C. Memorial Hospital, Chapel Hill.

* * *

Should the United States adopt policies to control population growth just as it already has developed policies to manipulate the economy?

How large a population should be allowed and how should the government go about realizing this maximum in an orderly fashion?



approximating the diuretic efficacy of meralluride

METAHYDRIN®
(trichlormethiazide)

To determine the relative efficacy of thiazide diuretics in congestive heart failure, Metahydrin (trichlormethiazide) and three other thiazides were measured against Mercuhydrin® (meralluride injection)—the standard diuretic. "The results leave little doubt that the diuretic efficacy, that is, the 'ceiling effect' in these terms, is not the same for different thiazides."* The assays ranged from about 40% of the effectiveness of Mercuhydrin through 67%, 77% to 90% for Metahydrin. The latter two values were thought to be significantly different from the lowest value and to be therapeutically important.

*Gold, H., *et al*: Closed Panel Conference: Present Status of the Management of Congestive Failure and Advances in Diuretic Therapy, Journal of New Drugs, 1:177, July-August, 1961.

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IN BRIEF: ADMINISTRATION AND DOSAGE: One 2 mg. or 4 mg. tablet once or twice daily. In acute, severe decompensation, Mercuhydrin® (meralluride injection) may be necessary initially.

PRECAUTIONS: As with all effective diuretics, vigorous therapy may produce electrolyte depletion. Patients with severely reduced renal function should be observed carefully since thiazides may be contraindicated. Care should be taken with patients predisposed to diabetes or gout. Patients with a tendency to potassium deficiency, as in hepatic cirrhosis or diarrheal syndromes, or those under therapy with digitalis, ACTH, or certain adrenal steroids, also should be watched carefully.

SIDE EFFECTS: Nausea, flushing, constipation, skin rash, muscle cramps and gastric discomfort have been occasionally noted; rarely thrombocytopenia and bone marrow depression, photosensitivity, cholestatic jaundice, pancreatitis, perimacular edema, gout and diabetes have been caused by administration of thiazides.

CONTRAINDICATIONS: Complete renal shutdown; rising azotemia or development of hyperkalemia or acidosis in severe renal disease; demonstrated hypersensitivity.

HOW SUPPLIED: Bottles of 100 and 1000 tablets.

These and other major questions about population problems in the United States will be explored at the University of North Carolina this fall at a Seminar on Population Policy.

The seminar is being made possible by a $3,500 grant just approved by the Conservation Foundation of New York City.

Dr. John B. Graham, UNC pathologist and chairman of the UNC Population Studies Committee, said that tentative plans are for the seminar to last for a day and a half.

Faculty members from UNC and neighboring institutions and four or five visiting lecturers will participate.

* * *

J. Mario de Leon, a 26-year-old Texan, has been named chief medical illustrator at the University of North Carolina School of Medicine.

de Leon is a graduate of North Texas State University at Denton and received his master of science degree in medical illustration from the Medical College of Georgia.

News Notes from the Duke University Medical Center

Dr. D. Bernard Amos, professor of immunology at the Duke Medical Center, served as president of an international conference on tissue typing for organ transplantation at Leiden, Netherlands, August 15-21.

Dr. Amos and two of his Duke colleagues, Dr. Chester M. Zmijewski and Dr. Richard S. Metzgar, also delivered papers during the conference on different tissue matching techniques.

The Duke Medical Center's organ transplant team recently performed its first kidney transplant using five different tisue matching methods as a prelude to the operation. It was an apparent success.

Following the Netherlands meeting, Dr. Amos and Dr. Zmijewski will attend the Congress of the European Society of Hematology at Strasbourg, France.

Dr. Amos recently was named chairman of a national advisory committee for collaborative research in the immunology of organ transplantation by Dr. Luther L. Terry, U. S. Surgeon General.

* * *

Duke University has received grants totaling $315,000 to aid in construction of a new medical teaching unit.

Announcement of the grants, from three private foundations, was made recently by Dr. William G. Anlyan, dean of the Duke Medical School.

He said that $200,000 has been received from the Avalon Foundation, $100,000 from the John and Mary Markle Foundation, and $15,000 from the Camille and Henry Dreyfus Foundation.

The funds are earmarked for construction of a teaching building that will be part of a new medical campus to be constructed at Duke during the next decade.

Total cost of the building, which will provide classrooms and multipurpose laboratories for medical students, will be $5.7 million.

Dr. Anlyan said it is anticipated that half of the total cost will be provided by the Health Professions Educational Assistance Act passed by Congress in 1964.

He said that the new facilities are vital to help replace outmoded and overcrowded facilities now in use.

Construction is expected to get under way in the summer of 1966.

* * *

A new personnel director, a new director of the medical records department, and four new departmental assistants have been appointed to the Duke University Medical Center staff.

The announcement was made by Charles H. Frenzel, administrative director for the Medical Center.

Named to the posts were Neil S. Bucklew, personnel director, Mrs. Betty W. Kernodle, medical records department director, Charles D. Hepler, assistant chief pharmacist, Cecil McCless, assistant personnel director, Charles Warren, administrative assistant in the department of radiology, and John P. Bayer, administrative assistant in nursing.

News Notes from the Bowman Gray School of Medicine of Wake Forest College

Dr. Ralph W. Goering has joined the faculty of the Bowman Gray School of Medicine as assistant professor of obstetrics and gynecology.

Dr. Goering, whose primary interests are in the area of endocrinology, holds the B.S. degree from Bethel College and the M.D. degree from the University of Puerto Rico.

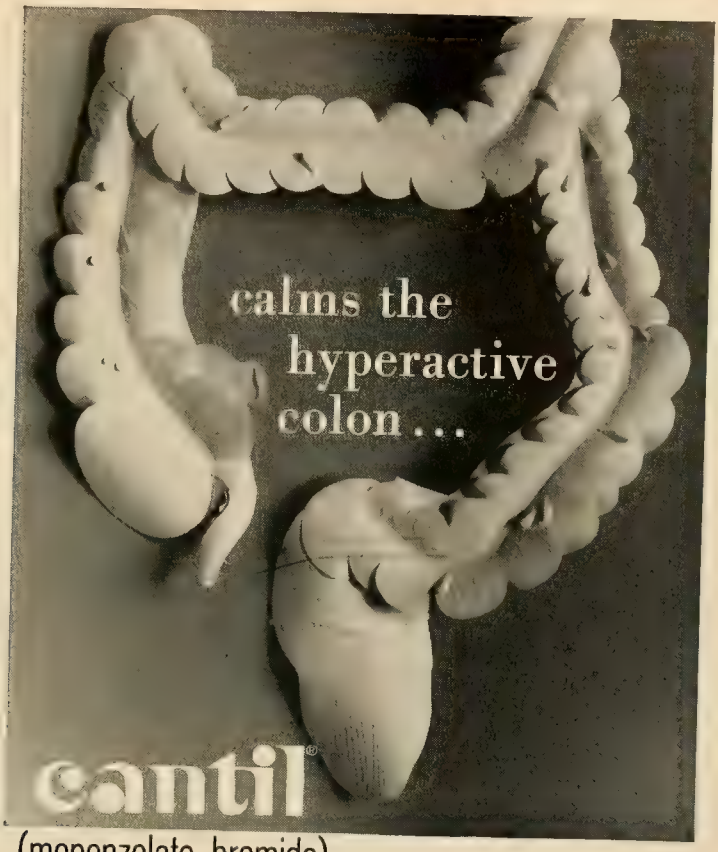
After completing internship and residency training at St. Francis Hospital, Wichita, Kansas, he studied as a research associate and senior fellow in obstetrics and gynecology at the University of Washington School of Medicine where he has served for the past year as clinical instructor in obstetrics and gynecology.

* * *

Dr. Camillo Artom, professor emeritus of biochemistry, was a recent speaker for the University of North Dakota's Distinguished Lectureship Series. His address was entitled "Alternate Pathways for Phospholipid Formation in Tissues."

* * *

Dr. Henry C. O'Roark II, instructor in obstetrics and gynecology, participated on the faculty



(mepenzolate bromide)

helps restore normal motility and tone

Cantil (mepenzolate bromide) works in the colon. In irritable colon, spastic colon, ulcerative colitis and other functional and organic colonic disorders, it acts to:

- control diarrhea/constipation
- relieve spasm, cramping, bloating
- make patients more comfortable

with little effect on stomach, bladder or other viscera.

"In 40 of 44 cases of irritable or spastic colon, Cantil [mepenzolate bromide] or Cantil with Phenobarbital reduced or abolished abdominal pain, diarrhea and distention and promoted restoration of normal bowel function . . . Cantil [mepenzolate bromide] proved to be singularly free of anticholinergic side-effects. Blurring of vision or dryness of the mouth were occasionally seen and were usually managed with a reduction in dosage. Urinary retention, noted in two cases was eliminated in one by reducing dosage."[1]

IN BRIEF:

One or two tablets three times a day and one or two at bedtime usually provide prompt relief. Cantil with Phenobarbital may be prescribed if sedation is required.

Dryness of the mouth or blurring of vision may occur but it is usually mild and transitory. Urinary retention is rare. Caution should be observed in prostatic hypertrophy—withhold in glaucoma. Cantil with Phenobarbital is contraindicated in patients sensitive to phenobarbital.

Supplied: CANTIL (mepenzolate bromide)—25 mg. per scored tablet. Bottles of 100 and 250.

CANTIL with PHENOBARBITAL—containing in each scored tablet 16 mg. phenobarbital (warning: may be habit forming) and 25 mg. mepenzolate bromide. Bottles of 100 and 250.

1-Riese, J.A.: Amer. J. Gastroent. 28:541 (Nov.) 1957

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for the seventh annual Southern Obstetric Seminar held July 26-30 in Asheville. He spoke on "Abdominal Amniocentesis" and "Post-Partum Hematomata."

* * *

Surgeons at the Bowman Gray School of Medicine and North Carolina Baptist Hospital have announced that the hand-reimplantation they performed on June 14 was successful.

The left hand of Robert Pennell, 26-year-old convict, was accidentally amputated by a single blow of a bush axe while he was working with a road work gang near Lowgap. He was taken to Northern Surry Hospital for first-aid treatment and then was rushed to North Carolina Baptist Hospital where the hand was put back during an eight-hour operation.

Dr. Jesse H. Meredith, associate professor of surgery who headed the surgical team, believes some 70 per cent of the hand's function will be restored.

* * *

Two otolaryngologists at the Bowman Gray School of Medicine were recently elected to offices in professional organizations at meetings in New York City.

Dr. John R. Ausband, associate professor of otolaryngology, was elected secretary of the American Broncho-Esophagological Society. Dr. James A. Harrill, professor of otolaryngology, was elected to the council of the American Laryngological, Rhinological and Otological Society.

* * *

Dr. Charles C. Middleton, assistant professor of laboratory animal medicine, has returned to South America to continue his studies on cardiovascular disease in monkeys. He will spend eight weeks in Leticia, Colombia, where he will conduct his research in a field laboratory. He will also purchase monkeys for the medical school's recently established primate colonies.

Last summer, Dr. Middleton and scientists from the Louisiana State University School of Medicine found, through their research in the jungle laboratory, that squirrel monkeys develop atherosclerosis naturally. This animal, therefore, became the most suitable model for research on the disease. Work this summer will involve principally woolly monkeys, cebus monkeys and spider monkeys.

* * *

Dr. Alan L. Kraus has become the sixth veterinarian to be appointed to an academic position in a medical institution after the completion of postdoctoral training in the Bowman Gray School of Medicine's Department of Laboratory Animal Medicine. Dr. Kraus was recently named director of animal research facilities at the Medical Research Institute of Michael Reese Hospital, Chicago.

North Carolina Committee on Nursing and Patient Care

Visiting in North Carolina hospitals is "a large problem" for nurses, doctors and administrators. And the most dissatisfaction with visiting systems seems to be in the smaller, rural hospitals with specified visiting hours.

These two major findings emerged from a statewide study of hospital visiting presented for the first time at a quarterly meeting, held in Durham on July 16, of the North Carolina Committee on Nursing and Patient Care.

The six-month study failed to find any completely satisfactory visiting systems. In view of this, no statewide system or schedule of visiting hours was recommended. However, the study team did recommend that an educational program be designed to reduce hospital visiting, especially on Sundays.

The study was conducted for the N. C. Committee on Nursing and Patient Care by the University of North Carolina Department of Hospital Administration and the Duke Endowment in Charlotte. The study team was composed of Dr. Robert R. Cadmus and Dr. James P. Harkness of UNC and Robert R. Hafner of Duke University.

It recommended specifically that the educational program to reduce hospital visiting be aimed specifically at: (1) the heavy traffic on Sundays; (2) limiting visitors to short-term patients (those in the hospital for only a few days) to members of the immediate family and the clergy; and (3) encouraging the use of "visiting notes" rather than personal visits by well-wishers.

Edgecombe-Nash Medical Society

Dr. Ray T. Doyle was speaker at the Edgecombe-Nash Medical Society at its monthly meeting on August 11. His subject was "Blood Clotting."

News Notes

The Nalle Clinic in Charlotte has announced the association of Dr. Donald F. Little in the practice of obstetrics and gynecology.

* * *

Dr. Benjaimn E. Morgan has opened offices for the practice of obstetrics and gynecology in Rocky Mount.

American College of Gastroenterology

The 30th annual convention of the American College of Gastroenterology will be held at the Americana in Bal Harbour, Fla., on October 25-27, 1965.

(Continued on page 426)



more complete relief for the "dyspeptic"

DACTILASE®

Dactilase provides comprehensive therapy for a wide range of digestive disorders. Its antispasmodic and anesthetic actions rapidly relieve pain and spasm. Dactilase decreases hypermotility without inducing stasis. In addition, it supplies digestive enzymes to help reduce bloating, belching and flatulence. Dactilase does not interfere with normal digestive secretions. Very often it can be a most useful answer to the dyspeptic's needs.

DACTILASE: Each tablet contains: Dactil® (piperidolate hydrochloride), 50 mg.; Standardized cellulolytic* enzyme, 2 mg.; Standardized amylolytic enzyme, 15 mg.; Standardized proteolytic enzyme, 10 mg.; Pancreatin 3X** (source of lipolytic activity), 100 mg.; Taurocholic acid, 15 mg.

*Need in human nutrition not established. **As acid resistant granules equivalent in activity to 300 mg. Pancreatin N.F.

Side Effects and Contraindications: DACTILASE is almost entirely free of side effects. However, it should be withheld in glaucoma and in jaundice due to complete biliary obstruction.

Administration and Dosage: One tablet with, or immediately following each meal. Tablets should be swallowed whole.

Supplied: Bottles of 60 and 250.

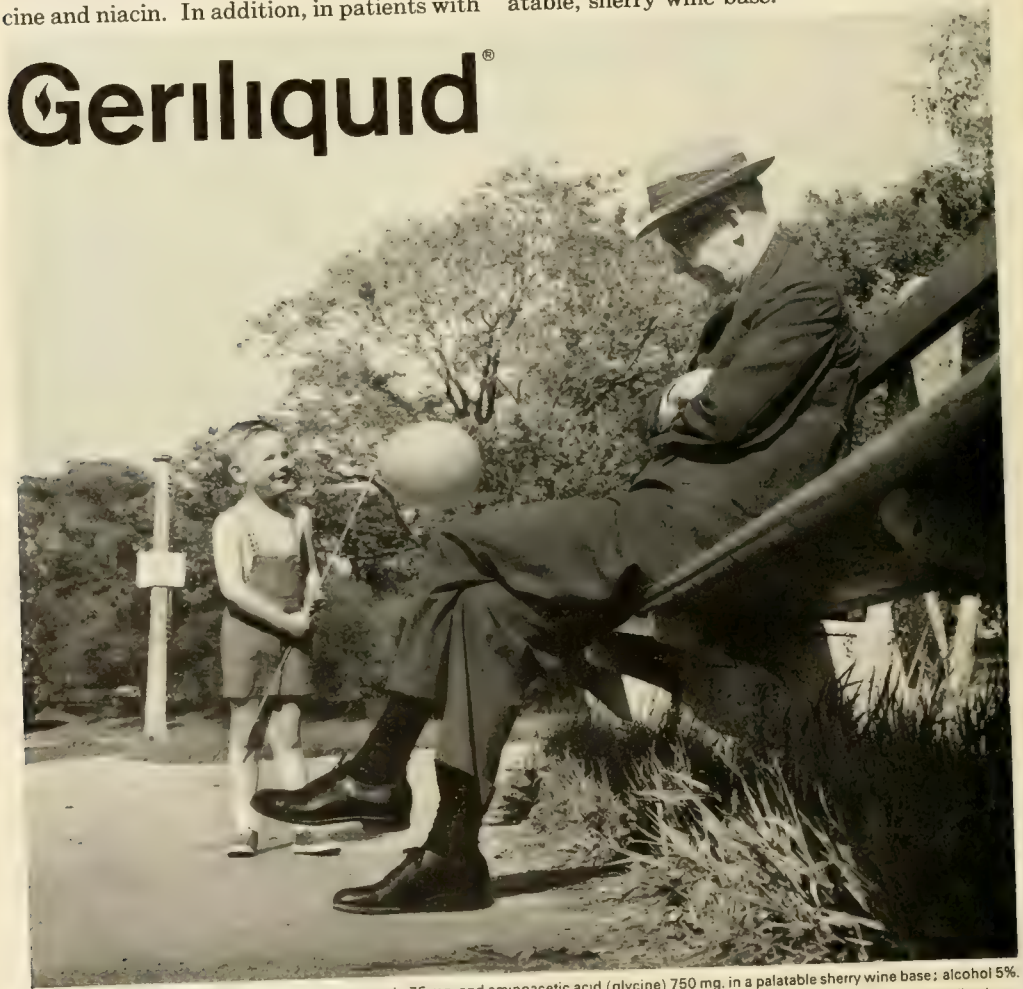
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when even southern sun fails to warm cold hands and feet

provide rapid, sustained vasodilation for warmth and relief of pain, dizziness and faintness in patients with impaired peripheral circulation

GERILIQUID warms cold hands and feet through the thermogenic action of glycine and through sustained vasodilation by glycine and niacin. In addition, in patients with impaired peripheral circulation, GERILIQUID increases the ability to walk farther with less pain. Patients particularly like the palatable, sherry wine base.

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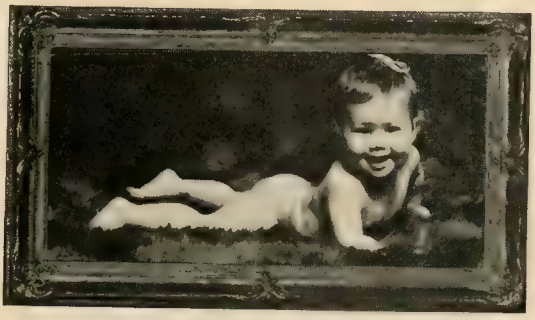
IN BRIEF: Composition: Each 5 ml. contains: niacin 75 mg. and aminoacetic acid (glycine) 750 mg. in a palatable sherry wine base; alcohol 5%.
Side Effects: Occasional lightheadedness or transient itching which may disappear with continued use. There are no known contraindications; however, caution is advised when there is concomitant administration of a coronary vasodilator.
Administration and Dosage: One or two teaspoonfuls 3 times a day before meals. If flushing is objectionable, dosage may be lowered. However, tolerance to flushing usually develops without loss of efficacy in regard to vasodilation.
Supplied: Bottles of 8 oz. and 16 oz.

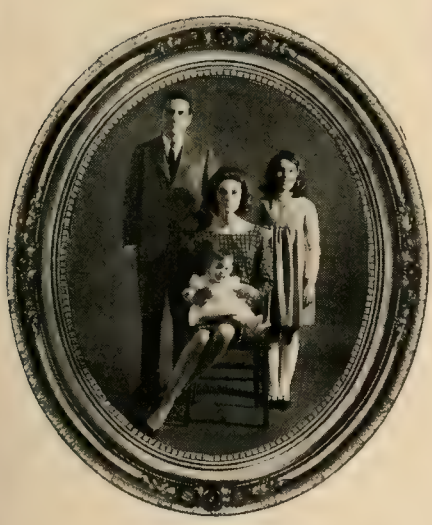
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COLIC, often in part a reflection of family tension, adds sleepless nights to patients' and parents' distraught days. Pediatric Piptal with Phenobarbital slows down spasm, diminishes pain and crying, improves feeding patterns . . . permits sleep and rest . . . for patient and family.

Pleasant tasting Pediatric Piptal with Phenobarbital is miscible in milk, formulas and fruit juices, and may also be administered by dropper directly on the infant's tongue. Dosage is 0.5 cc. 15 minutes before feeding; in severe cases, 1.0 cc. four times daily. High doses may occasionally cause constipation with tenesmus and, rarely, flushing without fever. Contraindicated in bowel obstruction or sensitivity to phenobarbital or anticholinergics. Available in 30 cc. dropper bottles, droppers calibrated to deliver 0.5 cc.

PEDIATRIC PIPTAL® WITH PHENOBARBITAL

each cc. contains: 6 mg. phenobarbital (warning: may be habit forming); 4 mg. Piptal® (pipenzolate bromide), and 20% alcohol in a pleasant-tasting solution.

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On October 28-30 immediately following the convention, the annual course in postgraduate gastroenterology will be given. Attendance at the course will be limited to those who have registered in advance.

Copies of the program and further information may be obtained by writing to: American College of Gastroenterology, 33 West 60th Street, New York, N. Y. 10023.

American Hospital Association

The American Hospital Association recently urged full cooperation of member hospitals in the adverse drug reaction reporting program and recommended that a pharmacy and therapeutics committee be responsible for reporting each incident.

Action by the AHA General Council and Board of Trustees urged "the Joint Commission on Accreditation of Hospitals to consider a pharmacy and therapeutics committee a required committee or function of the hospital medical staff, and to request the Joint Commission to strongly recommend that the adverse drug reaction reporting program of a hospital be a function of the pharmacy and therapeutics committee."

Earlier, the AHA informed its membership "every hospital should accept the responsibility to cooperate in evaluating the effects of drugs and participate in a program of reporting adverse reactions. Only through complete reporting can all necessary information about drugs be collected, documented, and disseminated to physicians, pharmacists, and hospital personnel."

American Society of Psychosomatic Dentistry and Medicine

The American Society of Psychosomatic Dentistry and Medicine has announced that it will provide basic courses in the art and science of medical hypnosis by invitation of local medical and dental societies.

For further information please contact Coordinator of ASPDM, 964 Delaware Avenue, Buffalo, N. Y., 14309.

The Epilepsy Foundation

Anybody in the United States can obtain regular supplies of habit-forming barbiturates, merely by filling out a simple questionnaire and sending it (along with a small monthly payment) to either of two drug firms, according to an investigation recently completed by The Epilepsy Foundation.

The Foundation is not making public the names of the two drug companies, fearing that to do so might encourage unqualified persons to obtain barbiturates through the mails. A Foundation spokesman did make clear, however, that no well-known ethical drug maunfacturer is in any way involved in the practice.

The Foundation study revealed that the operation conducted by the two companies appears to be permitted by present Federal and state laws. The technique used by both companies is a fairly simple one: An advertisement is placed in one of the pulp magazines offering "free information" about the treatment of epilepsy. No mention is made in the ad that drugs are for sale.

When a reader sends for this information, he receives a carefully-worded letter, offering anti-convulsants through the mail. The letter implies that a new and different remedy is being offered.

Actually, the active anti-convulsant ingredient in the drugs offered by both firms is ordinary phenobarbital—used by doctors for many years in treating the disorder.

The Epilepsy Foundation stressed that phenobarbital is a legitimate aid in the treatment of epilepsy—so long as the patient is under the direct supervision of a physician. But so far as the Foundation has been able to discover, neither of the two firms has any way of knowing whether the information provided by the patient on the requested questionnaire is accurate—or even truthful—although there does not seem to be any violation of the law as it now stands.

If this is true, any clever teenager who discovers that the main ingredient in these mail order drugs is phenobarital, and who is willing to give false information on a questionnaire, could obtain a supply of dangerous "goof balls" simply by sending for them. Technically, any violation of the law is committed by the person who puts false information on the forms requested by the two companies—not by the companies themselves.

The "Medical Director" of the drug firm, who writes the necessary prescription, is apparently protected by insisting that the form be filled out before the drugs are dispensed. The fact that the company doctor has not seen the patient—much less examined him—doesn't appear to prevent the company from assuming that the form has been filled out by an actual epilepsy patient.

But even if everyone of the applicants receiving such drugs is an actual epilepsy patient, the Epilepsy Foundation believes that the advertising and sale of anti-convulsant drugs directly to the public while circumventing the necessary patient-doctor relationship is both dangerous and unwise. The Foundation said that proper treatment of epilepsy requires the close, careful and continued attention of a qualified physician.



Prompt relief of pain and spasm in functional g.i. distress...



PIPTAL® (pipenzolate bromide) efficiently suppresses acid secretion and motility ... relieves pain and spasm of peptic ulcer. Despite its potent gastrointestinal effects, "its clinically effective therapeutic dose is well below that required to produce side reactions."[1] Because urinary retention is rarely a problem, PIPTAL (pipenzolate bromide) is "a highly desirable drug in the treatment of peptic ulcer in older patients ..."[2] Tolerance to PIPTAL (pipenzolate bromide) has not been demonstrated, and the drug may be administered over prolonged periods without loss of efficacy. *PIPTAL-PHB is specifically designed for the tense ulcer patient who will benefit from the sedative effect of phenobarbital.*

1—Pomeranze, J., and Gadek, R.J.: Am. Pract. & Digest Treat. *8*:73-77 (Jan.) 1957

2—Asher, L.M.: Am. J. Digestive Diseases *4*:272 (Apr.) 1959

PIPTAL®
(pipenzolate bromide)

PIPTAL®-PHB
(phenobarbital, 16 mg., pipenzolate bromide, 5 mg.)

IN BRIEF: PIPTAL—Each tablet contains 5 mg. pipenzolate bromide, PIPTAL-PHB—Each tablet (or 5 cc. of elixir) contains phenobarbital (warning: may be habit forming) 16.0 mg., Piptal (pipenzolate bromide) 5 mg. The elixir contains alcohol 20%.

Side Effects: Dry mouth, blurring of vision or drowsiness may occur.

Contraindications: Withhold in glaucoma, bladder or g.i. obstruction, cardiac arrhythmias and in sensitivity to anticholinergics or phenobarbital (Piptal-PHB). Caution should be observed in patients with prostatic hypertrophy.

Administration and Dosage: PIPTAL or PIPTAL-PHB Tablets: One tablet three times a day before meals and one or two tablets at bedtime. (PIPTAL-PHB Elixir: One teaspoonful three or four times daily for adults and children over six years of age.)

Supplied: PIPTAL (pipenzolate bromide) 5.0 mg. Tablets—bottles of 100. PIPTAL-PHB Tablets—bottles of 100. PIPTAL-PHB Elixir—bottles of 8 fluid ounces.

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The Month in Washington

Health, Education and Welfare officials are drafting rules and regulations for operation of the new Social Security medicare law.

The new law provides for persons 65 years and older a basic hospitalization plan financed with Social Security taxes and a subsidized, voluntary, supplementary medical insurance program. Both programs will start July 1, 1966.

The existing Kerr-Mills program of medical assistance to the needy and near-needy aged is expanded and combined with all the other federal-state medical assistance programs into one plan with simplified administration, a uniform grant formula, specified benefits, and minimum eligibility requirements.

Self-employed physicians are brought under Social Security retroactive to Jan. 1, 1965. They will be required to pay next April $259.20 each in Social Security taxes for this year. The tax will go up to $405.90 for 1966 and rise over the years to $514.80 by 1987. Physicians were the last profession to be covered by Social Security and the only group to be forced into the system over the protests of its professional organization.

Coverage and liability for taxes for interns and residents will not begin until Jan. 1, 1966.

The new law also increases Social Security cash benefits by an average of 7%, retroactive to Jan. 1, 1965.

To finance the new health care programs and the increase in cash benefits, both the Social Security tax base and tax rates will be increased. The tax base will be increased from the present $4,800 of workers' annual pay to $6,600 on Jan. 1, 1966.

Arthur E. Hess, who has been with the Social Security Administration since 1939 and in charge of disability insurance since 1954, has been named to head up the new SSA Bureau of Disability and Health Insurance to handle the medicare program. A spokesman said the SSA, which now has 35,000 employes, will add between 7,000 and 8,000 more in the next year to administer the program.

Commenting on the medicare program becoming law, F. J. L. Blasingame, M.D., executive vice president of the AMA, said in Chicago:

"We will watch developments in this new program and offer constructive suggestions, both to Congress and to the administrators of the program, in the interest of the maintenance of the highest quality of medical care.

"President Johnson has requested that we meet with officials of the Department of Health, Education and Welfare on the development of rules and regulations.

"Following our conference with Mr. Johnson on Thursday (July 29), initial meetings were held with HEW Secretary Anthony Celebrezze, exploring arrangements for AMA and HEW review of projected regulations and of problems of administration and interpretation of the law.

"The President also asked that we report back to him in two months on our progress."

The White House conference between Johnson and 11 top AMA elected and staff officials, developed from an action of the AMA House of Delegates in New York last June. The House approved a resolution including the following two resolutions:

> **Resolved,** That this House of Delegates restate its offer to meet with the President of the United States through our Legislative Task Force to discuss proposed medical care legislation with a view to safeguarding the continued provision of the highest quality and availability of medical care to the people of the United State . . .
>
> **Resolved,** That the American Medical Association strongly urge those branches of the government interested in the formulation, the enactment, and the implementation of laws which deal with the provision of professional medical services to the public to seek and utilize the advice and assistance of the physicians who will render such services. Such advice and assistance should be received through our chosen representatives, the officers of the American Medical Association . . .

The first AMA-HEW conference on medicare at the staff level was held in Washington a week after the program became law.

HEW was consulting representatives of the American Hospital Association even before the legislation was signed into law.

The Social Security Administration, in administering the basic and supplementary health care programs, will utilize Blue Cross,

Blue Shield, private health insurance carriers or combinations of them as "fiscal intermediaries." At this writing, they had not been named.

HEW said the physician will be the key figure in the basic as well as the supplementary program. He will decide upon admission to a hospital or posthospital extended care facility, order tests, drugs and treatment, including home health services, and determine the length of stay, HEW said.

As to length of stay, however, hospitals and extended care facilities participating in the program will be required "to have in effect a utilization review plan providing for a review of admissions, length of stays and the medical necessity for services provided."

Such reviews "would ordinarily be carried out by a staff committee of the institution," and include other professional personnel such as registered nurses and medical social workers in addition to two or more physicians.

As an alternative, HEW said, reviews could be conducted by a similar group outside the institution—preferably one established by the local medical society and some or all of the hospitals and extended care facilities in the locality.

Under the supplementary program, the patients could pay the doctor and be reimbused 80 per cent of a "reasonable" fee. If the doctor so chose, he could let the patient assign to him the amount the patient would be reimbursed. If payment is on the basis of an assignment, the "reasonable" fee would have to be accepted as the full payment. If the physician receives payment only directly from the patient, he can charge the amount he chooses regardless of what is determined to be a "reasonable" fee.

In determination of a "reasonable" fee, HEW said, the supplementary insurance carriers must "assure that the charge on which the reimbursement is based is reasonable and is not higher than the charge used for reimbursement on behalf of the carriers own policyholders or subscribers for comparable services and under comparable circumstances."

In Memoriam

The Cleveland County Medical Society felt the sting of death in the passing, on July 8, 1965, of Dr. Fred Falls. The memory of one of the most respected and beloved members of our profession will linger long in the minds of his colleagues as well as of a great host of patients and friends throughout North Carolina and beyond.

Dr. Falls was born in Lawndale, North Carolina, where he attended the local school, and later graduated from Boiling Springs High School where he was active in all phases of school activity including basketball and football. Upon graduating from high school, he matriculated at Wake Forest College and graduated with a BS. degree in medicine in 1928. He transferred to Tulane University Medical School to complete his medical education, and received his M.D. degree in 1930. A two-year internship was then served in the Henry Grady Hospital in Atlanta, Georgia. He then returned to his home town of Lawndale and began the general pratice of medicine. This practice was interrupted by the Second World War, and in 1942 he began four years of active duty in the United States Army, spending two and one-half years in the Pacific area with the 108th Station Hospital. After his discharge from the Army in 1946 he moved his family to Shelby, where he began the general practice of medicine and continued in this busy practice until about six months before his death.

Dr. Falls was an active and later an honorary member of the Cleveland Memorial Hospital Medical staff, a member of the Cleveland County Medical Society, the North Carolina State Medical Society, and the American Medical Association. At one time he was a member of the board of trustees at Cleveland Memorial Hospital. Dr. Falls was further active in the Masonic Lodge, Shelby Rotary Club and Central Methodist Church, of which he was a loyal member.

During his busy years of practice he kept informed of new developments in medicine by attending numerous post-graduate courses, including one in traumatic surgery at the University of Pennsylvania and another in cardiology at Duke University Medical School.

Dr. Falls tempered the confinement of his busy medical practice with his interests in farming. During his practice in Cleveland County he rapidly won the respect and admiration of his colleagues, was loved by his patients, and by his actions demonstrated the characteristics of a dedicated physician with a noteworthy concern and depth of understanding for those persons entrust-trusted to his care. He was a gentle man who gave kind, soft-spoken words, patient friendly help, and comfort to the many thousands who sought his capable help and advice. He will be increasingly missed by patients and friends alike.

Be it resolved, that these expression of our love and respect be recorded in the minutes of the Cleveland County Medical Society, The North Carolina State Medical Society and that a copy be sent to his family.

E. S. King, M.D., Secretary
Cleveland Memorial Hospital Staff

Health Hints for Football Practice

It's football practice time again—time for coaches and athletes to remember the health hints that will ensure top performance during the first warm days of the season, says the American Medical Association.

The AMA offers these suggestions to coaches to prevent players' heat exhaustion and heat stroke:

1. Require a careful medical history and check-up prior to the beginning of practice.
2. Schedule workouts during cooler morning and early evening hours in hot weather.
3. Acclimate athletes to hot-weather activity by carefully graduated practice schedules.
4. Provide rest periods of 15 to 30 minutes during workouts of an hour or more during hot weather.
5. Supply white clothing (to reflect heat) which is loose and comfortable (to permit heat escape) and capable of absorbing perspiration.
6. Furnish extra salt and drinking water. (The old idea that an athlete should be denied water during workouts doesn't stand up).
7. Watch athletes carefully for signs of trouble, such as inattention, lethargy, awkwardness, or unusual fatigue. Symptoms of salt and water depletion may include headache, nausea, and weak and rapid pulse.
8. Remember that temperature and humidity, not the sun, are the important factors to consider. Heat exhaustion and heat stroke can occur in the shade.
9. Know what to do in case of an emergency, including immediate first aid and prearranged procedures for obtaining medical care.

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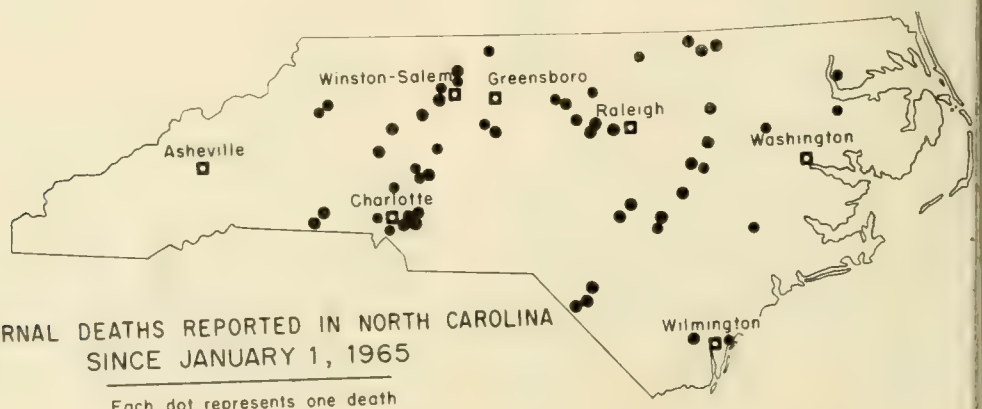
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Each dot represents one death

NORTH CAROLINA
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IN THIS ISSUE:

Urinary Tract Infections
Janet I. Fischer, M.D.

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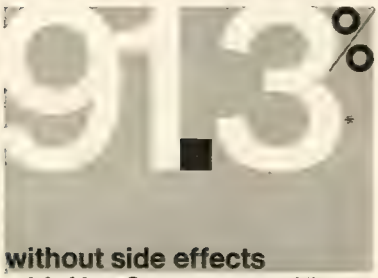
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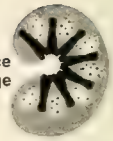


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References: (1) Carroll, G.: Urologists' Letter Club, June 1, 1964. (2) McDonald, D. F., and Short, H. B.: Address to the Fourth Interscience Conference on Antimicrobial Agents and Chemotherapy, New York, Oct. 26-28, 1964.

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Urinary Tract Infections

JANET J. FISCHER, M.D.

CHAPEL HILL

The problem of urinary tract infections is one of the major challenges facing the medical profession today. There are many unsolved questions about the initiating events and course of these infections, as well as their progression to the end stage of chronic pyelonephritis with uremia.

Many people have such infections. Some experience acute episodes of pyelitis or, more correctly, pyelonephritis; years later some patients die of chronic pyelonephritis. Since no one can predict who will reach this end stage of the disease, each clinical episode is treated as an isolated event. This concept is not adequate.

In spite of the availability of many antibiotic drugs, pyelonephritis is encountered at the autopsy table as a major cause of death in 3% to 5%, and as a contributing cause in 15% of the cases[1, 2]. Only 17% of cases reported as significant pyelonephritis at autopsy are diagnosed before death[3]. Little can be done to improve renal function in the patient with uremia from chronic pyelonephritis. In fact there is some doubt that the disease can be arrested even with antibiotic therapy once the patient has reached this point. The best approach is to prevent him from reaching it.

At least 90% of urinary tract infections are subclinical and thus are not detected by the usual history, physical examination or screening urinalysis; bacteriologic studies are necessary for diagnosis. Laboratory methods are available for the study of urinary tract flora and can be easily adapted to the office of the practicing physician. These methods are essential to decide (1) whether the infection has been cured or merely suppressed, (2) whether a clinical relapse means failure of previous antibiotic therapy or a reinfection, (3) whether a bacteriologic relapse has occurred, and (4) whether on treatment the organism is eradicated.

For editorial comment see page 461

Read before the First General Session, Medical Society of the State of North Carolina, Charlotte, May 3, 1965.

From the Department of Medicine, University of North Carolina School of Medicine and North Carolina Memorial Hospital, Chapel Hill.

Definitions

Bacteriuria is defined as the presence of as many as 10,000 microorganisms per milliliter of bladder urine by our criteria and those of Sanford[4], but as 100,000 microorganisms per milliliter by Kass[5]. However, very few cases fall between these two counts.

Pyuria is commonly defined as more than 5 white blood cells (WBC) per high power field (HPF). Factors that are difficult to control, such as the speed of centrifugation, volume of urine centrifuged, and volume of urine in which the sediment is re-suspended, enter into this definition. A more accurate definition is more than 10 WBC/cu mm of uncentrifuged urine[6, 7]. Since this counting chamber technique is time-consuming, a more practical definition is more than 1 WBC/10 HPF of uncentrifuged urine.

Pyelonephritis is defined as the pathologic alterations occurring subsequent to multiplication of pathogenic bacteria in the renal parenchyma and pelvocalyceal system.

Urinary tract infection has occurred if bacteriuria is demonstrated on two occasions, with or without pyuria.

Diagnosis

To diagnose urinary traction infections bacteriologically, an adequate sample of bladder urine must be obtained without contamination. The study of contaminated urine for bacteria and white blood cells is misleading. Catherization involves a 6% risk of infection[8], and should be done only if clean-catch mid-stream specimens cannot be obtained. Positive findings on a voided specimen are meaningless. Two specimens are necessary if a clean voided specimen is obtained as recommended by Kass[5].

Suprapubic aspiration of the bladder is not always easy to do[9]. The preferred method is the collection of a clean-catch mid-stream specimen. The essentials of this method of collection are: (1) cleansing of the periurethral tissues; (2) a good urinary stream which does not come into contact with perineal tissues; (3) a "catch" of the midportion of this stream in a sterile container; (4) referigeration of this specimen if it cannot be studied within 30 minutes.

Tests for bacteria

Once an adequate specimen is obtained it should be studied for bacteriuria. Several different tests are available. In our laboratory the bacteria are identified and a pour plate of a 1:100 dilution of urine is made to estimate whether the bacterial count per milliliter is greater than 10,000, greater than 100, or somewhere between these two figures.

The Griess nitrate test depends on the presence in the urine of large numbers of bacteria which reduce nitrites to nitrates. The Griess agent contains sulfanilic acid, acetic acid, and alpha-naphthylamine. When this is added to urine containing nitrite azo-alpha-amino naphthaline parabenzine, sulfonic acid (a red compound) is formed. This test is insensitive and can give negative results when bacilluria is present. (In one series it detected less than 50% of the cases of bacteriuria.)[10].

"Urescreen" involves the reduction of triphenyl tetrazolium chloride to triphenyl formazan, which is visible as a red precipitate after four hours' incubation at 37 C of 2 ml of urine and the reagent. This test in the hands of one investigator yielded 14% false-negative results and 8% false-positive results[10]. Also, it is necessary to be extremely accurate about the time of incubation, and the result is not available for four hours.

The best rapid screening method that will give results while the patient is in the office or clinic is a gram stain of uncentrifuged urine on a clean glass slide. Gram-negative rods on this slide are found in 80% of the cases of bacteriuria of more than 100,000 organisms per milliliter[5]. This is used as a screening test and is followed by identification of the bacteria present and a count of the number per milliliter. Miniature culture plates and other modified culture techniques all have the disadvantage of not providing any data for 24 hours, and no real advantages over the procedure of bacterial identification and pour-plate counts. Streak-plate counts can be substituted for pour-plate counts with reasonable accuracy if melted agar is not readily available.

The organisms usually found in urine are *Escherichia coli, Aerobacter-Klebsiella, Proteus* species, *Pseudomonas,* paracolons, and enterococci. *E. coli* is present in more than 50% of the specimens obtained from structurally normal urinary tracts and prior to antibiotic treatment. The reverse is true for *Pseudomonas* and *Aerobacter-Klebsiella* infections. Eighty-four per cent of bacteriuric patients have *E. coli* infections.

Tests for pyuria

In addition to bacteriologic studies upon a properly obtained urine specimen, it is essential to study the same specimen for pyuria. This can be done by centrifuging an unspecified volume of urine for an unspecified length of time at an unspecified number of revolutions per minute and then resuspending the sediment in an unspecified volume, as is usually done in a microscopic urinalysis.

The criterion usually given for pyuria by this inaccurate technique is more than 5 WBC/HPF. This is far too high a figure and fails to detect many cases of pyuria. Chamber counts of uncentrifuged urine show that the normal white blood cell con-

tent of urine is less than 10 WBC/cu. mm[6]. Comparative studies[7] show this is equal to or less than 1 WBC/10 HPF if uncentrifuged urine is examined on a clean slide with a cover slip. The examination of the urine sediment is very important for detecting casts, erythrocytes, parasites, etc. However, it is better to determine the presence of pyuria by examining uncentrifuged urine.

Other methods of studying the urine are helpful but not essential. The Addis count[12], which is obtained by examination of the sediment of an aliquot of a timed urine specimen, is time-consuming. The glitter cell phenomenon depends on the staining of certain leukocytes a pale blue and observing brownian movement of the granules in their cytoplasm as described by Sternheimer and Malbin[13]. This characteristic leukocyte probably results from a combination of hypotonicity and decreased resistance of the leukocyte to changes in osmolarity. Although glitter cells are often seen in the urine of patients with pyelonephritis, they are pathognomonic of this disease.

Upper urinary tract involvement

The only urinary findings that are helpful in the diagnosis of upper urinary tract disease are marked proteinuria, which suggests renal involvement, and white blood cell casts, which are pathognomonic of renal involvement. The other clinical findings are usually lacking, although it is helpful if flank tenderness is demonstrated. Changes in the blood urea nitrogen and phenolsulfonphthalein values, in the ability to concentrate and dilute the urine, and in intravenous pyelograms are not manifestations of early disease.

For the early detection of upper tract involvement, we look for white blood cell casts and marked proteinuria. If these signs are not found, it is reasonable to assume that the upper urinary tract is involved in at least two thirds of patients who have suffered repeated episodes of bacteriuria or persistent bacteriuria. This assumption is based on several lines of evidence. One of the most convincing is a study of young patients with poliomyelitis who had worn indwelling catheters for a year. These patients all had bacteriuria, and two thirds had demonstrable upper urinary tract disease after one or two years[15].

Clinical Patterns of Disease

The insidiousness of upper urinary tract disease and the silence of progressive pyelonephritis have been emphasized by many. Kleeman and others[3] list the following clinical patterns of pyelonephritis:

1. Constitutional symptoms of anorexia and malaise, with or without fever.
2. Predominant gastrointestinal symptoms.
3. Severe symptoms of lower urinary tract infection.
4. "Negative" urinary sediment.
5. Exacerbation of pre-existent hypertension.
6. Heavy proteinuria or predominant hematuria or both.
7. Acute renal "shut-down."
8. Atypical necrotizing papillitis.
9. Complicating some other renal disorder.

Pyelonephritis can present any one of these atypical clinical patterns. Failure to appreciate this fact is probably why only 17% of significant cases of pyelonephritis coming to autopsy were diagnosed *ante mortem*. The same study showed that the records of 70% of these patients contained sufficient information to suggest the diagnosis. The evidence is clear that we must appreciate the chronicity, the frequency, and the seriousness of this disease if we are to diagnose and treat patients prior to the end stages.

There is evidence that bacteriuria precedes and accompanies almost all cases of pyelonephritis. Progressive upper urinary tract disease without concomitant lower urinary tract disease apparently occurs rarely, if ever, in patients with untreated pyelonephritis. Figure 1 represents a hypothetical case.

It is postulated that the course of the disease extends over a lifetime, beginning with infrequent clinical episodes seen by the pediatrician and obstetrician and progressing to constant bacteriuria in middle age with a few episodes of cystitis, and finally progress-

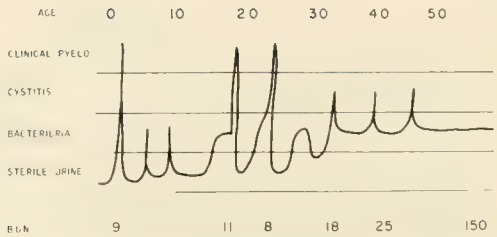


Fig. 1. Hypothetical course of patient with pyelonephritis. Such a patient admitted at age of 55 dying in uremia may give only an insignificant history of prior renal infection.

ing to uremia at the age of 50 to 55 years. At this time the history of previous renal disease may be unimpressive.

Prognosis

The prognosis of patients having severe urinary tract infections is not favorable. Table 1 shows that in all four series summarized, only 50% of children hospitalized for urinary tract infections are well on follow-up examinations in later years. The death rate is about 16%, and about 40% have infection or obstruction[16-19].

The Relation of Bacteriuria to Pyelonephritis

Since the outlook for pyelonephritis is poor and the course so insidious that early diagnosis is difficult, let us focus upon the problem of bacteriuria. Methods for detecting and following this relationship are available, and indeed a number of studies are in progress on just this point. There is no doubt that such a relationship exists. Kass[20] has shown that 40% of bacteriuric women observed throughout pregnancy manifest clinical pyelonephritis prior to or at delivery if untreated. Eradication of bacteriuria prevents pyelonephritis in these women during that pregnancy. Hence we reason that the eradication of bacteriuria offers the best approach to the prevention of pyelonephritis. Bacteriuria is quite common. It occurs in 98% of patients with indwelling catheters. It is present in 4% to 6% of outpatients at a general hospital, and in 11% of pregnant women[5]. Surprisingly, 1.1% of school girls already have bacteriuria[22], as shown in Table 2.

Management

The management of this chronic problem requires detecting and identifying the offending organism as described previously. A distinction must be made between a clinical cure, which means the disappearance of symptoms, and a bacteriologic cure, which signifies eradication of the causative organism.

Patients with bacteriuria can be divided into five groups, depending on the course and treatment of the disease. Groups 1, 2, and 4 in Table 3 are similar. In group 1 the bacteriologic cure was spontaneous, and in groups 2 and 4 it resulted from drug treatment. All three groups of patients have sterile urine. However, both immediate (one month) and long-term (six months) follow-ups are necessary to detect recurrences. Group 4 represents the repeaters—that is, patients who had urinary tract infections, who were cured by treatment, but who were found to be reinfected at the six-month follow-up examination. Their treatment was

Table 1

Prognosis of Urinary Tract Infection in Children

Author	Wharton	Macaulay & Sutton	Duluca	Steele & Ledbetter & Crawford
Patients	30 Females	22 Females and 10 Males	1279 Males & Females	51 Females & 21 Males
Diagnosis	Pyelitis	UTI	UTI	UTI
Hospitalized	All	All	All	All
Years Follow-up	1-20	6	3-13	11 to 27
Urinary Tract Abnormalities	57% (total)			
Death %		16%		18%
Renal Insuff. %	6%		35%	8%
Infection %	50%	40%		22%
Obstruction %			16%	35%
Well	43%			52%

UTI—Urinary Tract Infection

Table 2
Incidence of Bacteriuria

Author	Patients	Dx.	Location	Bacteriuria (%)
Kass	337 Females	Various	Medical OPD	6
	102 Males	Various	Medical OPD	4
	54 Females	Diabetes	Medical OPD	18
	37 Males	Diabetes	Medical OPD	5
	152 Females	Pregnant	Hospital	11
	100 Patients	Indwelling Catheters	Hospital	98
	350 Patients	Post Single Catherization	Hospital	2
Smythe	77 Patients	Hypertension	OPD & Hosp.	18
	77 Patients	(Matched Controls)	OPD & Hosp.	8
Kaitz & Williams	309 Patients	Various	Medical Wards	17
Kunin	5132 Females	Students	School	0.04
	7731 Males	Students	School	1.1
Mou	74 Patients	Elderly or Chronically Ill Without Catheters	Males	28
			Females	45

adequate, but they are subject to reinfection and need further evaluation.

Group 3 comprises patients who are not cured by antibiotic treatment. They may show clinical improvement, but they continue to harbor the same organism. They need to be treated again with another drug or at least with a prolonged course of the same drug.

Group 5 patients have had adequate treatment but have become reinfected with a different organism as soon as the first organism was eradicated. Bacterial identification is necessary to distinguish this group of patients from group 3. Nothing was wrong with the original course of therapy in group 5 patients. They simply need treatment directed against the new organism.

The first episode of urinary tract infection should be treated with a relatively nontoxic drug for at least two weeks. The aim of this therapy is to suppress the multiplication of the microorganism in the urinary tract for a period, in the hope that the factors which normally keep the bladder sterile will become operative, and that the infection will clear up and urine remain sterile. Reinfection should be treated in much the same way, with a drug known to be effective against the pathogen isolated. Relapses require treatment with a different drug or with a prolonged course of the same drug. Both relapses and reinfections require prolonged follow-up studies.

Patients suffering repeated relapses with the same organism should be refered to a urologist for a source of infection. They should be evaluated for urethritis, vaginitis, and other special problems, including ana-

Table 3
Management of Bacteriuria

Group	Rx	Follow-up (6 months)	Follow-up of Urine at 1 weeks	1 month	6 months	Result	Further Management
1	0	0	S	S	S	Cure	None
2	drug	0	S	S	S	Cure	None
3	drug	0 or +	Same organism			Rx failure	Treat with different drug
4	drug	0	S	S	+	Rx adequate; reinfection or relapse	Treat with same or different
5	drug	0 or +	Different organism			Rx adequate; reinfection	Treat with different drug

S-sterile

tomic and functional abnormalities of the urinary tract.

Conclusion

It is hoped that these suggestions based on current bacteriologic studies offer a helpful approach to the common problem of urinary tract infection.

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Urethritis in the Female

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I have long been aware of chronic urethritis in the female as a common problem and have treated it with the usual conservative methods, consisting of antibiotics, sulfonamides, urethral suppositories, and sitz baths. These measures usually resulted in relief of the acute, and improvement of the chronic, symptoms; but it was all too evident that some residual symptoms remained. Many of these cases I referred to a urologist or gynecologist. Often the patient would not go, or would go for a few treatments, improve, and fail to return for follow-up. Because of these failures, I would see the same patients again and again.

A little over three years ago, at the suggestion of a urologist, I began adding to the above treatment dilation of the urethra with sounds. This has been the accepted method

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of treatment by most of those interested in this condition, and I have found it most rewarding. Not only have I had good results and happy patients, but I have learned that the condition is much more common than I had fully appreciated.

The final solution to the problem of chronic urethritis in the female is not now apparent, because in many cases the treatment has to be continued intermittently for many

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years to keep the patient symptom-free. The purpose of this paper is primarily to arouse the interest of the general practitioner, since he sees the patient first and, with his close patient-doctor relationship, can follow the cases more closely than the urologist ever can.

Anatomy of the Urethra

A review of the anatomy of the female urethra may help to clarify this problem. This structure corresponds to the male prostatic urethra, lying proximal to the prostatic utricle, and is a relatively short canal measuring from 3 to 4 cm in length. At its junction with the neck of the bladder, it lies about opposite the middle of the symphysis pubis and extends downward and slightly forward to open into the vestibule between the glans clitoridis and the orifice of the vagina. In the lower part of its course it forms the urethral carina of the vaginal wall. Laterally and anteriorly it is surrounded by the pudendal plexus. Above, it is separated anteriorly from the symphysis pubis by the lower part of the prevesical space of Retzius.

The walls of the urethra are distensible and are lined by mucous membrane with numerous longitudinal folds, one of which, on the posterior wall, is more prominent than the others and is termed the crista urethralis. The mucosa contains numerous small glands known as the urethral and paraurethral glands, a group of which on each side is drained by the inconstant ductus paraurethralis, opening into the vestibule.

From reviewing the literature and analyzing the problem, it is evident that urologists have failed to impress the medical profession with the fact that urethritis is a disease entity. It produces a considerable amount of referred pain to various areas in the pelvis and lower part of the abdomen, often distracting the physician's attention from the urethra. Consequently these women go from doctor to doctor and often undergo unnecessary pelvic operations because the urethra is not investigated.

No one questions the pain of prostatitic origin, yet few seem to realize that women experience similar pain due solely to urethritis. This should not be difficult to understand because, as noted, the prostatic urethra in the male is homologous to the entire female urethra, and the structures are similarly innervated. The pain differs in degree only, because the paraurethral glands of the female are homologous to the prostatic glands in the male, and both are subject to inflammation.

Diagnosis

The diagnosis of chronic urethritis in the female is relatively simple. In the chronic phase, the urine is usually free of pus. In the course of a vaginal examination, palpation of the urethra from the vesical orifice downward discloses significant tenderness when inflammation is present. The paraurethral glands are situated on both sides of the urethra, but sometimes only one side is infected and the pain is referred to that side. Chronic redness and swelling of the external urethral meatus (called a urethral caruncle) or redness of the distal part of the urethra usually indicates some degree of urethritis.

Insert a small sound, 24 to 26 French, gently into the urethra. If there is no urethritis, this maneuver is not painful. If it does cause pain, and if gentle palpation of the urethra around the sound demonstrates markedly tender areas, one can be sure that there is some inflammation of the paraurethral or urethral glands. Often this inflammation is associated with cervicitis or vaginitis. Cervicitis can contribute to the urethritis because of a common lymphatic supply to the cervix and urethra, both of which empty into the iliac glands.

The prevalence of urethritis is easily understood on the basis of repeated inoculation of pathogenic organisms into the urethra due to its close proximity to the vagina, cervix, and rectum. The anatomic changes that come about during the childbearing years as well as changes resulting from the menopause also play important roles in the production of urethritis and recurrent cystitis.

The symptoms may be urinary or nonurinary in nature. The urinary symptoms

in order of occurrence are: (1) frequency, (2) urgency, (3) dysuria, (4) nocturia, (5) straining to void, (6) slowness in emptying bladder, (7) dribbling, (8) retention of residual urine, (9) acute retention, and (10) "bearing down" or feeling of pressure in the bladder region.

Most of the patients give a history of long-standing urinary symptoms. In fact, many report difficulty in voiding since childhood but did not regard it as significant. Many women do not know what a normal voiding pattern is because, unlike men, they seldom void in the presence of another person and hence have no basis of comparison. Careful questioning is necessary to bring out the true picture in most of these cases. A great many women have urinary symptoms virtually throughout life and seem to accept frequency and occasional attacks of dysuria and urgency as more or less normal.

The more important of the paraurethral glands are submucosal and lie in a plane horizontal to the urethra. When those beneath the sphincter muscle become involved, the pain that comes at the end of voiding is caused by constriction of these infected glands. This is often what brings the patient to the doctor and directs the attention to the urethra.

Pain in the flanks and even in the kidney region is usually thought to be due to reflux. This occurs when the bladder contracts in the presence of a swollen, tight urethrovesical opening and a patent ureteral opening into the bladder, allowing the urine to go back up the ureter under pressure. The condition is usually relieved by adequate dilation and treatment of the urethra. One patient who obtained only partial relief from dilation was completely relieved by wearing an indwelling catheter for one week. When the symptoms returned on removal of the catheter, repair of the bladder neck from within the bladder and a plastic procedure on the ureteral orifice brought complete relief.

This type of flank pain is often wrongly attributed to ovarian disorders. In some cases the ovaries are found to be somewhat enlarged or cystic, and an operation is performed, usually without bringing relief.

Among the symptoms caused by chronic urethritis, dyspareunia is probably foremost. In my opinion, urethritis is by far the most frequent cause of this distressing symptom, especially in patients who, in the early months or years of marriage, had normal, painless intercourse. Too often, unless urethritis is considered, dyspareunia is attributed to psychoneurotic factors. The patient usually comes to doubt her role as female partner, particularly since the doctor says there is nothing physically wrong—that "it is all in her head." The husband accepts this explanation and tells her that she is complaining unnecessarily. The underlying cause remains untreated, and the patient becomes more frustrated. In dealing with such cases, I have known the dyspareunia to disappear after treatment for urethritis, to the great satisfaction of the patient.

Treatment

Once the diagnosis is established, I discuss the situation with the patient, stressing the fact that it will require time to establish and maintain control of the problem. I caution her against thinking she is well when she becomes almost symptom-free after two or three treatments, because relapses will occur shortly if she does not follow through. If pyuria or acute urethrovesical symptoms are present, I prescribe one of the sulfanomides combined with Pyridium, an analgesic, and hot sitz baths twice a day. As soon as the acute symptoms abate, I start the dilations.

Dilation of the urethra

Of the several types of sounds or dilators available, I use the Walther type, which is is hollow and serves the dual purpose of catheterizing the bladder at the same time. Before the dilations are begun, the patient is asked to void. She is then catheterized with the sound and the amount of residual urine noted. In many cases she will have from 6 to 10 ounces without being aware of it. A good lubricant must be used, preferably one containing a local anesthetic. At present I am using Tega-Dye (Ortega). It affords a certain amount of anesthesia, and

I have not found anyone who is allergic to it. Usually I have my nurse apply this preparation to the urethra and wait five minutes before starting the dilations.

I begin with 24 or 26 French sounds and usually do not go further on the first visit. I increase each time until we reach size 34 or 36 French. The dilations are done at weekly intervals until the maximum size desired is reached and the patient remains asymptomatic during the interval. This usually requires from two to five dilations. The intervals are increased to two, three and four weeks, depending on how long the patient remains free of symptoms. When she is completely asymptomatic, she is discharged with instructions to return as soon as the symptoms reappear, particularly the so-called pressure symptoms. If the pressure does not disappear within two or three days, dilation should be repeated. This is often necessary in two to four months.

Because of urethral congestion the early stages of dilation may produce bleeding; however, this is not likely to be serious if one does not try to dilate too rapidly. I find that Pyridium given four times daily for two to three days following each dilation makes the patient more comfortable and helps to inhibit infection.

Urethral suppositories are usually ordered every other night after the first or second dilation. When the patient is asymptomatic, this schedule is reduced to once a week. If the patient is past the menopause, I prescribe urethral suppositories containing nitrofurazone, an estrogen, and diperodon, a local anesthetic (Furacin E). If she is still menstruating, I prescribe suppositories containing nitrofurazone with hydrocortisone, but no estrogen. I feel that these suppositories are a useful adjunct to the treatment of urethritis. Not all urologists share this opinion. This suppository was developed by Youngblood[2] in connection with Eaton Laboratories, and has been used extensively by him. I have seen the results, since many of my patients were involved in the early stages of the study.

Meatotomy

If the patient has an extremely tight external urethral meatus which will not allow the desired dilator to be passed without blanching or hanging as the sound is withdrawn, I refer the patient to a urologist for a meatotomy and panendoscopic examination. Besides enlarging the meatus, this procedure provides valuable information about the urethra and bladder. Ideally the panendoscopic examination should be done on all patients, but it is almost impossible to get them to consent to it, particularly when they are not having marked symptoms. As long as the patient is getting good results from conservative treatment, I consider that she is not being neglected.

On referring a patient for meatotomy, I instruct her to return to me within 48 hours for dilation. I have found that a lapse of as much as a week will allow the urethra to grow together again. I have seen cases where at the end of ten days the scar was not obvious and the meatus was as small as before. On the other hand, when dilation is done 48 hours after the meatotomy and repeated in five to ten days, the opening will usually remain adequate.

Transurethral resection

In severe cases which do not respond to dilation and meatotomy, transurethral resection of the vesical orifice or an intravesical procedure should be considered. This rarely becomes necessary if you can make the patient understand that the dilations must be continued at regular intervals. Urologists who formerly performed transurethral resections now agree that meatotomy and dilations are usually more effective. The former usually does not give permanent relief, and dilations have to be continued indefinitely in many cases. If progress can be made with conservative therapy, few women will desire surgery.

In the presence of a marked cystourethrocele, the anterior vaginal wall may have to be repaired for effective dilation, although it has been interesting to see how many of these cases respond to conservative therapy. Usually repair of the cystocele alone does not give completely satisfactory results—a fact that accounts for many unrewarding gynecologic operations. If the procedure is

followed by specific treatment of the urethra, results are complete.

Neglect of Urethritis

The general practitioner is not the only physician who overlooks chronic urethritis. Some urologists seem to underestimate its importance, and a considerable number of obstetricians and gynecologists pay it little attention. To paraphrase a quotation of the late Sir Winston Churchill: "Never has so little (so small an organ) caused so much pain to so many."

The pressure or bearing-down feeling that many women have a few days prior to menstruation is often due to chornic urethritis. The relief of this symptom has been gratifying to many young women—even teenagers. The pressure and discomfort some women experience in the region of the bladder during pregnancy is almost always related to the urethra. I have employed dilation during the early stages of pregnancy—even up to the fifth month—and find that it brings considerable relief from this syndrome—which sends a good many women into the hospital in the last month of pregancy thinking they are in labor. If the attending physician is aware of this problem and will prescribe a sulfonamide with Pyridium, or Pyridium alone, plus something for pain, the patient will be more comfortable and will not want to enter the hospital prematurely.

Urethritis with stenosis is rather frequent in children—even as young as one year of age. When a little girl has recurrent attacks of pyuria accompanied by frequency and dysuria, the urethra should be examined. If the condition is allowed to continue, she will inevitably become a chronic complainer as she grows older.

Although I did not list headache as a symptom of urethritis, I had had two patients who, after being adequately dilated and freed of urethral symptoms, were completely relieved of persistent headaches. Thereafter the headache became a signal of recurring urethritis and the need for dilation. I will not attempt to explain this relationship.

Summary and Conclusion

My experience with urethritis in general practice is discussed. A lack of interest on the part of many physicians is noted. A multiplicity of symptoms are pointed out and a conservative, rational method of treatment is outlined.

It is emphasized that the general practitioner can manage this problem adequately in most cases, and if he does, fewer patients will go untreated. For various reasons, some women will not consult a specialist except in severe cases or when referred by their family physician.

General practitioners are urged to interest themselves in this distressing and persistent condition, and to work closely with their colleagues in urology and obstetrics-gynecology in its management. Chronic urethritis afflicts so many women that the urologist cannot possibly see all of them.

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Idiopathic Hypoparathyroidism Associated with Chronic Moniliasis

A Problem in Management of Repeated Severe Seizures

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The following case is presented primarily as a basis for discussing the management of severe, repeated tetanic seizures, and secondarily to add another case of idiopathic hypoparathyroidism associated with chronic moniliasis to those thus far reported.

Report of a Case

Past history

A 10 year old white girl had been in excellent health until the age of 6 months. when whitish plaques appeared over the gums, tongue, pharyngeal wall, and lips. The infection was so severe that feeding became a major problem for approximately 7 to 10 days. A diagnosis of "trench mouth" was made, and several injections of penicillin were given. Shortly after this treatment a vesiculopustular eruption appeared beneath the chin and on the shoulders. This eruption became "weepy" and over a three-month period spread over the entire body, including the scalp. The oral lesions improved somewhat, but never completely disappeared. Numerous medicinals were were given orally and ointments applied, without significant improvement. During this entire period the child's general condition remained good, and essentially no constitutional symptoms were associated with the diffuse eruption.

At the age of 3½ years the child was admitted to Duke University Hospital for treatment of this persistent skin condition. On admission she was described as a well developed, well nourished, intelligent child with extensive skin lesions involving the entire body and head, and crusted lesions about the lips. The hair was thin and matted, with small areas of alopecia. The entire scalp was covered with an oily, scaly eruption marked by areas of induration. There was a vesiculopustular rash over the arms, legs, trunk, anterior chest wall, and beneath the chin. Lesions in all stages of development, and some weeping and crusting, could be seen over most of the body. Those on the arms, legs, and trunk were described as annular, with pale centers and active borders of confluent vesicles and pustules. There were ulcerated white plaque-like lesions on the tongue, buccal membranes, and gums. In addition, the nails of the right index finger and left thumb were abnormally thickened and black.

While the patient was at Duke Hospital, agglutination for **Monilia** was positive in a titer of 1:160. Reaction to a Monilia skin test was 2 plus. Cultures of the mouth and nails grew **Candida albicans.** Cultures of the hair and lesions of the leg and arms grew **Microsporum canis.** Therapy consisted of Desenex ointment and gentian violet applied to all skin and oral lesions, and epilation of the scalp with x-ray. Later, local therapy included the use of Sopronol, Salinidol, 2 per cent iodine, 3 per cent salicylic acid in alcohol, and ultra violet ray. Also, desensitization with monilia vaccine was undertaken. After 58 days of therapy cultures of skin from behind the ears were still positive for **Monilia.** The patient was discharged after 63 days of therapy, showing slight improvement according to the mother.

Shortly after the child's discharge the mother procured an ointment, from a "non-professional salve mixer," which caused extreme erythema, desquamation, and marked constitutional symptoms. As the erythema and desquamation resolved, however, the skin lesions essentially cleared, with the exception of the whitish, fissured areas at the angles of the mouth. No improvement of the nails was noted.

From the age of 3½ to 4 years, all of the nails except those of the last two fingers of the left hand became exceedingly thick, chalky, and deformed. A regimen of calcium tablets was started at the age of 4 years in an attempt to improve this deformity. For the past six years the mother has continued to give from three to six calcium tablets daily, with the exception of short periods varying from three to ten days. About one year ago the tablets were withdrawn completely for a ten-day period, and the child complained repeatedly of vague muscle cramps and "drawing" pains of the hands and began to have diarrheal stools. The parents noted that reinstitution of the calcium medication alleviated these symptoms, and thus it was continued until two months prior to admission. Within ten days after she stopped taking the tablets the child began having mild tetanic episodes, which progressed in number up to 10 to 15 per day. These episodes were characterized by severe cramps and carpopedal

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Fig. 1. Note the fissures and crusting at angles of mouth. Candida albicans was cultured from these lesions. Also note the sparse eyebrows.

spasm. On the day of admission she had a moderately severe episode of laryngospasm and was hospitalized.

Family history disclosed that a 10-month-old sister (a nonidentical twin) had died of "malnutrition." This infant weighed 6 pounds 4 ounces at birth, and 13 pounds 8 ounces at 4 months of age. At the age of 4 months, vomiting and diarrhea developed and persisted intermittently, with progressive weight loss and death at the age of 10 months. At death her weight was approximately 6½ pounds. Review of her record suggests the possibility of hypoadrenocorticism. Three other teenage siblings were all living and well, as were the parents.

Physical examination

The temperature was 100 F, pulse 88, respiration 26, and blood pressure 126/62. The patient was a well-developed, well-proportioned intelligent girl in no acute distress. The pertinent physical findings were as follows: (1) large areas of alopecia on the scalp; (2) hair, eyebrows, and lashes sparse and easily plucked; (3) slight ptosis of both upper eyelids and mild blepharitis; (4) changes in the right lens consistent with early cataract formation; (5) whitish fissured areas at the angles of the mouth (Fig. 1); (6) many dental caries; (7) all the fingernails except the last two of the left hand markely thickened and deformed (Fig. 2); (8) Chvostek's sign, Trousseau's sign, and peroneal reaction produced with ease; (9) deep tendon reflexes hyperactive.

Laboratory findings

A hemogram was within normal limits. Initial urinalysis revealed a pH of 6, specific gravity 1.025, a trace of albumin, no sugar, and 6 to 8 white blood cells per high power field. A Sulkowitch test for urinary calcium was reported as a faint trace. Reaction to this test on several specimens thereafter was negative, as were the results of routine urinalyses.

Blood chemistry values on admission were as follows: serum calcium 4.8 mg/100 ml; phosphorus 7.1 mg/100 ml; carbon dioxide combining power 55 vol% (pH determination not available); alkaline phosphatase 7.9 Boadansky (BU); blood urea nitrogen (BUN) 11 mg/100 ml; $Na^+ = 143$ mEq/liter; $K^+ = 4.0$ mEq/liter; chloride 99 mEq/liter; total proteins 7.7 gm/100 ml.

Skull films showed no abnormaltities; roentgenograms of the long bones of the arms revealed normal bony texture and no evidence of a pathologic process. Stools grossly appeared normal, and fat stains revealed scanty amounts of fat droplets. An electroencephalogram revealed a diffusely abnormal record characterized by an excessively slow dominant frequency with random bursts of 3 cycles per second activity in the waking record, without focal activity. Cultures of nail scrapings and culture of the angles of the mouth grew **Candida albicans.**

Hospital course

Shortly after admission the child had a classic tetanic seizure characterized by carpopedal spasm, severe muscle pain, and mild laryngo-



Fig. 2. Demonstration of the thickened, scaly deformed nails. Cultures of nail scrapings revealed Candida albicans.

spasm without loss of consciousness. This seizure was abruptly terminated by the intravenous administration of 10 cc of a 10% solution of calcium gluconate. On admission a regimen of 1 gm of calcium gluconate four times a day was begun, and the patient was observed for the following four days. During this time she complained frequently of muscle cramps but did not manifest any further overt tetanic signs. The Trousseau, peroneal, and Chvostek signs continued to be present. During this time the child ate well and was fairly active. Her sleep was occasionally interrupted by muscle cramps of the legs and arms.

An Ellsworth-Howard test performed on the fifth hospital day showed a good response to parathormone. The results were as follows: Hourly excretion for the three hours prior to the administration of 50 units of parathormone was 22.88 mg, 31.03 mg, and 27.26 mg of phosphorus respectively; the hourly excretion during the three-hour period after injection of parathormone revealed 95.94, 113.29, and 91.6 mg of phosphorus respectively.

During the Ellsworth test two severe generalized tonic-clonic seizures occurred, the first of which was preceded by approximately 30 seconds by muscle cramps of the legs, carpopedal spasm, and laryngospasm. The initial severe seizure was promptly stopped by the intravenous injection of a 10% solution of calcium gluconate. There was rapid recovery of consciousness without depression. The second generalized seizure was terminated by the intravenous administration of 10% calcium gluconate. After the second seizure the patient continued to be unresponsive for about four minutes and then over a 20-minute period was alert and lucid. In the four-hour period following the Ellsworth-Howard test, she had six severe generalized grand mal seizures. Initially she received intravenous injections of a 10% calcium solution (calcium chloride and calcium gluconate) to terminate the seizures; on their recurrence, however, it was found necessary to give a diluted calcium solution by constant intravenous drip. Also, 1¾ grains of sodium Amytal was administered intramuscularly.

About three hours after the last generalized convulsive episode the patient could be aroused, and responded sluggishly to questions. Two hours later she responded well and was fairly alert. At this point oral doses of calcium gluconate and large doses of vitamin D were begun. Eight hours after this medication the intravenous administration of diluted calcium chloride was discontinued.

The regimen used consisted of 7 gm of calcium gluconate daily; a diet limited to 300 mg of phosphorus; 100 cc of Amphogel with meals; and 450,000 units of vitamin D. At the initiation of this regimen the serum calcium was 4.8 mg/100 ml and phosphorus 7.5 mg/100 ml. Nine days after the beginning of therapy the serum calcium level was 7.0 mg/100 ml and the phosphorus level 5.3 mg/100 ml. At this point, for the first time, the Chvostek, Trousseau, and peroneal signs could not be elicited. Also at this point, Sulkowitch tests of urine were showing trace positive results.

The patient was discharged on her seventeenth hospital day on a regimen of 6 gm of calcium gluconate daily, Amphogel taken with meals, 450,000 units of vitamin D, and a low phosphrous diet. Mycostatin ointment to be applied to the nails was also prescribed.

Follow-up

Twenty-five days after the initiation of treatment the serum calcium content was 10.6 mg/100 ml and phosphorus 8.1 mg/100 ml. The urine persistently showed a 1 plus calcium content as judged by the Sulkowitch test. On the following two days this value was 3 plus; thus the vitamin D was reduced to 250,000 units daily and the oral calcium gluconate to 4 gm daily. Shortly thereafter the daily urinary calcium returned to 1 plus. Fifty days after the beginning of therapy the serum calcium was 10.8 mg/100 ml, phosphorus 5.4 mg/100 ml, and alkaline phophatase 5.4 BU. At this time the fingernails showed definite improvement, especially obvious at the base.

A repeat EEG obtained after 50 days of therapy indicated definite improvement, but the abnormalities noted on the initial tracing persisted.

On a maintenance program of 200,000 units of vitamin D, a moderately low phosphorus diet, and 4 gm of calcium gluconate daily, the patient was entirely asymptomatic. Periodic Sulkowitch tests and urine specific gravity determinations are being done by the mother as a precaution against hypercalciuria.

Discussion

This patient meets the crieteria for idiopathic hypoparathyroidism outlined by Drake and others[1]. These include a low serum calcium level and an elevated serum inorganic phosphorus level in the absence of renal insufficiency; the absence of bone abnormalities by roentgenography, in order to rule out rickets or osteomalacia as the cause of the hypocalcemia; and signs and symptoms of tetany. Also, steatorrhea and chronic diarrhea must be eliminated as etiologic agents. Stein and Waldron[2] added another criterion in their analysis of 52 cases: an organic phosphorus level of 7.0 mg/100 ml or greater in patients under 16 years of age. Our case also meets this requirement.

An interesting feature in this patient was the repeated episodes of severe generalized hypocalcemic convulsions and the large

amounts of calcium (gluconate and chloride) that were required to keep her free of seizures. As stated previously, the initial severe seizure was controlled immediately by the intravenous administration of 10% solution of calcium gulconate. After this seizure she was alert and felt fine until 4½ hours later, when she had the first of a series of six severe generalized seizures. Twenty-four cubic centimeters of calcium gluconate given intravenously was required to terminate the first seizure of this series. Then, 30 minutes later, another seizure required 20 cc of calcium gluconate solution, and one hour later another required 12 cc. After this, 20 cc of 10% calcium chloride was diluted in 300 cc of 5% dextrose in normal saline, and a constant intravenous drip of this solution was maintained. Within minutes after this treatment was begun, another severe seizure occurred, which required another 16 cc of 10% calcium given intravenously to terminate it. Despite the slow intravenous drip of diluted calcium solution, the patient had another convulsion which was terminated by increasing the rate of calcium infusion. In addition, 1¾ grains of sodium Amytal was given intravenously and 5 cc of 50% magnesium intramuscularly.

In an atempt to prevent further seizures, the continuous infusion of diluted calcium chloride was increased considerably and ECGs were taken frequently in order to determine the Q-Tc interval. The Q-Tc (K) is equal to the $Q\text{-}T^3$ divided by the square root of R-R. Kissen and others[4] report the mean Q-Tc (in children) as 0.366, maximum 0.42, and have devised a nomogram for rapid conversion of the Q-T to Q-Tc. Ziegler[5] gives 0.419 for the average Q-T divided by the square root of the R-R index between the ages of 8 and 12 years.

The speed of the dilute calcium chloride infusion was gauged by the Q-Tc. When the Q-Tc was maintained near 0.38 and did not exceed 0.42, the patient had no seizures and no signs of muscular irritability. The Q-Tc prior to the initial seizure of the series was 0.5 and immediately before another seizure was 0.44. Immediately after an ECG showed a Q-Tc of 0.43, the patient exhibited carpal spasm, developed generalized stiffness with mild laryngospasm, and vomited. The infusion of calcium chloride solution was rapidly increased and these manifestations immediately subsided. The ECG following this "aborted" seizure revealed a Q-Tc of 0.374. About three hours later the patient responded slowly to questions and two hours later answered questions alertly. At this point, oral doses of vitamin D and calcium were started and were retained.

The diluted calcium chloride infusion was continued slowly over the following nine hours. During this period the child rested fairly well and at its end was perfectly alert, ate well, and stated that she felt well with the exception of pain over the veins used for the calcium injections. Later these veins thrombosed, but caused no difficulty. Over the 4½-hour period that the six seizures occurred, a total of 107 cc of calcium solution (35 cc calcium chloride and 72 cc calcium gluconate) was given. During the entire period of infusion the heart rate was monitored almost constantly, and it remained between 60 and 70 most of the time.

Intravenous calcium therapy obviously is not without some risk, and therefore a reasonable guide for the amount given must be available. Repeated serum calcium determinations are impractical in a situation such as this patient presented, since to get an accurate picture frequent readings are mandatory. The Q-Tc interval proved to be a satisfactory guide for dosage in this case. It was not until fairly rigid control of the Q-Tc interval was maintained in a normal range by the continuous intravenous drip of diluted calcium chloride solutions that this patient was prevented from having recurrent seizures. We are of the opinion that this is a satisfactory method of meeting the problem of repeated severe hypocalcemic seizures, especially when the patient is in such a state that oral medication cannot be retained.

Gardner[6] has demonstrated in a newborn infant that a high phosphorus load, in addition to producing hyperphosphatemia and hypocalcemia, can produce a decrease in the

total serum magnesium level. It is now apparent that tetany can result from low serum magnesium levels. Although this patient received only one small dose of magnesium sulfate well after the last seizure was terminated (which probably did not contribute significantly in the over-all management of the case), it is suggested that this medication may have a place in the treatment of hypoparathyroid tetany.

The repeated tetanic convulsions despite the intravenous administration of large doses of calcium was striking. A total of 4,385 mg of calcium ions were given over the period in which six seizures occurred. The immediate response to the rapid infusion of calcium, the correlation with the Q-Tc interval, and the immediately preceding carpopedal spasm in two of the seizures left little doubt as to the nature of the seizures. In patients with hypoparathyroid tetany, a single intravenous injection of 300 to 500 mg of calcium ions is usually sufficient to control the symptoms during the acute phase. In the present patient, approximately ten times that amount was given before the seizures and coma abated.

Recent tracer studies with radiocalcium (^{45}calcium)[7] have demonstrated that in states of normal parathyroid function and acute hypoparathyroidism, there is an equilibrium between blood calcium and mobilizable calcium from bone. Acute lowering of serum calcium in parathyroidectomized dogs resulted in the release of bone calcium into the blood at a rate sufficient to maintain a serum level of approximately 7.0 mg/100 ml.

The need for such large doses of calcium to control the seizures in the present patient suggests some impairment in the release of bone calcium at the time of her seizures. It is conceivable that this would occur under circumstances of chronic hypoparathyroidism if bone calcium was depleted. In this case, following the calcium infusions, the homeostatic mechanism would result in a net deposition of administered calcium into bone before an elevation of the serum calcium could be maintained. This situation is reminiscent of the occurrence of tetany requiring large amounts of calcium that is sometimes seen following parathyroidectomy in patients with hyperparathyroidism and bony demineralization, where a marked deficiency of total bone calcium is assumed. Schulman and Ratner[8] reported a case, and cited others, in which bony demineralization was associated with hypoparathyroidism which appeared to be best explained on the basis of severe chronic deficiency of body calcium.

Radiographic examination did not demonstrate bony demineralization in our patient, although an alkaline phosphatase value was suggestively elevated before treatment. However, it should be recalled that the patient had received unknown amounts of calcium up until two months before hospitalization, a factor which may have prevented a chronic calcium deficit of a magnitude that would result in visible demineralization. These observations suggest that in certain instances of severe hypoparathyroidism, a negative calcium balance occurs.

Summary

A case of idiopathic hypoparathyroidism associated with chronic moniliasis representing a problem in management of repeated generalized hypocalcemic seizures is presented. A method of managing hypocalcemic seizures, utilizing a constant intravenous calcium solution regulated on the basis of frequent determinations of the Q-Tc interval, proved to be most satisfactory in the case presented.

Addendum

Follow-up examination seven years after hospitalization indicates that the patient has continued vitamin D regularly in a dosage of 200,000 units daily. There have been no symptoms of tetany or seizures. The monilia infection of her nails persists. Her serum calcium is 9.0 mg/100 ml and phosphorus 4.2 mg/100 mil.

Retinal Responses to Ischemia and Hyperoxia

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Investigation of the retinal responses to ischemia and hyperoxia is made possible by the accessibility of the eye, the ease of observation of the retina in the living state, and the precise and easily recognized effects of loss of retinal function. Such investigations are important not only for their clinical applications to ocular disease, but also because in many ways retinal responses are similar to those of other central nervous system tissues.

Anatomically the retinal neural chain consists of three basic elements: the receptor cells, or rods and cones; the bipolar intermediate cells; and the ganglion cells, whose axons make up the optic nerve. These cells receive nourishment from two sources. The outer rods and cones lying against the pigment epithelium are supplied by the vascular lakes of the choroid and choriocapillaris. No capillaries are found within this zone of the retina and the branches of the central retinal artery play little or no part in meeting its metabolic requirements. In contrast, the inner ganglion cells, whose axons form the nerve fibers which run toward the disc, are richly supplied by branches and capillaries of the retinal arterial circulation. The bipolar cells occupy the intermediate position, but the contribution of the retinal circulation to their support is probably greater than that of the choroidal circulation.

Response to Ischemia

Retinal ischemia may be produced therefore by any of three distinct mechanisms. The retina may be deprived of both retinal and choroidal blood, or of either alone. The responses of the retina to ischemia are not the same for all three mechanisms, and in fact are quite different.

When the retina becomes ischemic because of complete or partial occlusion of the central retinal artery or one of its branches, function is lost within seconds. There is usually marked constriction of the arteriolar tree, and within four minutes the ganglion cells begin to swell and become cloudy. This change is not irreversible, and even when it lasts for hours, complete return of visual acuity and visual field may occur. Seldom is the circulation completely occluded, and even when segmentation of the blood column is visible, it often disappears in several hours. Similarly loss of function is incomplete, since light perception or hand-motion vision ordinarily remains even when the central artery is involved.

Experimentally and pathologically, the first irreversible change is death of ganglion cells[2, 3]. Even with advanced necrosis of the inner retinal layers, the rods and cones may appear quite normal and the electroretinogram is not extinguished, indicating that a functional response to light is preserved[4]. Similarly at the fovea, where the innermost portions of the retina are less than 150 micra from the choriocapillaris, no cloudy swelling occurs and the contrast with the surrounding pale and swollen cells produces the classic cherry-red spot.

The evidence is good, therefore, that the outer 130 micra of the retina is supplied by the choroidal circulation and that ischemia secondary to retinal arterial occlusion has little effect on these cells. The ganglion cells, on the other hand, rapidly swell and become cloudy. After about two hours of complete circulatory deprivation, and probably after considerably longer periods where flow is merely reduced, cell death begins and ganglion cells disappear. The axons of these cells eventually degenerate, producing optic atrophy, and the cloudy swelling disappears probably as a result of cell death and breakdown of the cell membranes.

When the retina is deprived of its choroidal circulation and the retinal circulation is intact, swelling is much less marked and

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transparency is usually retained. Clinically this situation occurs most frequently in bullous retinal detachments. Although some nutrients almost certainly pass through the subretinal fluid to the retina, particularly in flat detachments, the outer elements of the retina degenerate, with loss of rods and cones and cystoid degeneration[5]. The fovea is particularly vulnerable, as might be inferred from its lack of retinal circulation. In general the rods and cones seem more resistant to ischemia than do the ganglion cells, and under conditions of retinal detachment or choroidal sclerosis, death of these cells probably requires from days to weeks rather than hours. The amplitude of the electroretinogram in detachment of the retina is subnormal, and as the receptor cells die the amplitude of the b wave decreases progressively. Some feel, therefore, that the electroretinogram in cases of complete detach is of prognostic value[4].

The retina can be deprived of both the choroidal and retinal circulations if the intracular pressure is increased to levels above arterial supply pressure; if a traumatic injury severs the structures immediately posterior to the globe; or if positive *g* forces or circulatory failure arrest the circulation. These situations are clinically rare except for the transient interruption of circulation produced when the ophthalmic systolic pressure is measured by ophthalmodynamometry.

Experimentally the technique of increasing intraocular pressure above supply pressure has been of great use in investigating the retinal response to ischemia. This can be done by pressing on the eyeball with the finger[6], by use of an ophthalmodynamometer[7], or by means of a plethysmographic goggle[8]. Conversely, supply pressure can be reduced by inducing positive *g* forces in the human centrifuge[9].

The functional response is similar in all of these situations. For four to six seconds vision is unchanged; peripheral vision is then progressively lost. Pilots call this phase "grey-out." Interestingly enough, vision in the nasal field is lost first, followed by that in the temporal periphery. Just before all vision is lost (blackout), a small island of vision remains at, or just temporal to, fixation. This most resistant area would correspond to the area of the retina between the disc and the macula. In the human, com-

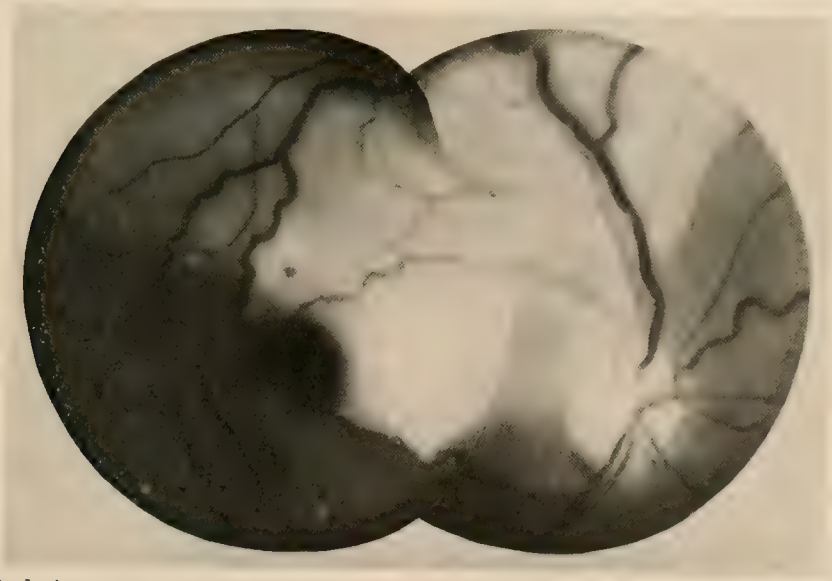


Fig. 1. Occlusion of the superior branch of the right central retinal artery. Choriodal circulation is intact. Note the pale cloudy swelling of the ischemic area and the partial "cherry-red" spot at the macula. (Patient seen through the courtesy of Dr. Martin Kreshon.)

plete return of function has occurred after the ocular circulation has been interrupted in this manner for as long as 22 minutes[10]. In the cat, interruption of the circulation for periods of less than 90 minutes also produces no irreversible changes, although longer periods of occlusion effectively produce cell death[2]. Since in these situations all intraocular circulation is occluded and the choroidal lakes are emptied of blood, it seems reasonable that occlusion of the retinal circulation alone, or loss of the choroidal circulation alone, would afford an even longer ischemic interval before irreversible damage occurs. As we have seen, there is clinical evidence that this is the case.

Response to Hyperoxia

The retinal response to hyperoxia depends upon the degree and duration of the condition and the maturity of the retina. The response of the immature retina to hyperoxia went unrecognized for years until retrolental fibroplasia, or "the retinopathy of prematurity," was finally associated with oxygen administration[11]. In the immature retina high oxygen tensions apparently produce immediate transient vasoconstriction, which is later followed by vaso-obliteration. Around the ischemic areas thus produced, new capillaries bud and neovascularization occurs. These changes usually begin at the ora serrata and progress posteriorly. Gliosis, vascularization of the vitreous, and retinal detachment follow, and blindness is the end result.

The mature retina is not as easily damaged by high oxygen tensions. Vasoconstriction of both the arterial and venous circulation does occur, but this constriction does not diminish retinal tolerance to ischemia[12]. Indeed hyperoxygenation markedly delays ischemic loss of vision after ocular circulatory occlusion[6, 7]. This delay in blackout may reflect greater oxygenation of the vitreous rather than any intrinsic retinal change. The vitreous then acts as an oxygen "reservoir" after circulatory occlusion. Although prolonged hyperoxia has produced irreversible retinal damage in mature animals[13, 14], such changes have not as yet been observed in humans. Oxygen convulsions limit the period of exposure to arterial oxygen tensions of over 1500 mm Hg, and prolonged exposures to lower tensions have apparently not produced irreversible retinal changes. Should the clinical utility of hyperbaric oxygenation increase and methods of seizure control be employed, it is quite possible that instances of significant damage to the human retina may be discovered.

Comparison of Retinal and Cerebral Responses

When the retinal response to ischemia and hyperoxia is compared to that of the brain, some interesting similarities and differences are observed. The retina has a higher metabolic rate than the brain, and as might be expected, under similar conditions visual function is lost before consciousness. Under positive *g* conditions, for example, greyout and blackout occur before syncope. In spite of these high metabolic requirements, the retina is remarkably resistant to irreversible ischemic damage. As noted, total circulatory occlusion may be tolerated for 22 minutes, and partial occlusion for much longer periods. The brain, on the other hand, is irreparably damaged by occlusion lasting only half as long. An ocular "reservoir" of oxygen does exist following hyperoxia, and perhaps under normal conditions as well. The vitreous may store enough oxygen to prevent immediate ganglion-cell death, while the rods and cones are probably relatively resistant to hypoxia. There is evidence that a high rate of anaerobic glycolysis occurs in these visual cells[15], and energy produced in this manner may account in part for their resistance to ischemia.

Although oxygen is probably the most critical metabolite, other metabolic needs must be met by the ocular circulation. Even were it possible to oxygenate the entire retina by diffusion from the intact choroidal circulation as in hyperbaric oxygenation, other metabolites could neither be provided nor removed in the absence of the retinal circulation, and cell death would eventually result. Clinically, in retinal arterial occlusion the maintenance of an arterial pO_2 of 1,780

mm Hg for half an hour has failed to influence cloudy swelling or function during the period of oxygenation[16]. Full return of vision and field the following day ruled out irreversible retinal infarction.

In the brain as in the retina, hyperoxia produces vasoconstriction. This vasoconstriction seems to have a protective effect, for if it is abolished by adding carbon dioxide to the breathing mixture, oxygen convulsions occur much more quickly. The addition of small amounts of carbon dioxide to the breathing mixture also delays the loss of vision after ocular circulatory occlusion longer than when pure oxygen is inhaled[17]. The responses of the retinal and cerebral vessels to hyperoxia and carbon dioxide thus seem to be similar and to be locally controlled.

Summary

Retinal function is extremely sensitive to ischemia—even more sensitive than cerebral function. Retinal cells, on the other hand, appear to be relatively resistant to ischemic cell death as compared with those of the brain. Full return of function may occur after as long as 22 minutes of occlusion of both the choroidal and retinal circulations.

The retinal response to hyperoxia is primarily vascular. Vasoconstriction in the adult retina and vasoconstriction and vasoobliteration in the immature retina are the usual primary responses. The prevalence of retrolental fibroplasia in the immature human retina and the toxic effects of hyperoxia on mature animal retinas suggest that it may be possible to produce irreversible retinal damage in adult humans by prolonged and severe hyperoxygenation.

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Optimum Use of Hospitals

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Blue Cross strongly supports the optimum use of hospitals. Quality care and medical safety are essential factors. Both outpatient and inpatient facilities should be adequate to insure services commensurate with medical needs.

More and more of industry's dollars are going into prepayment, either through union negotiations or voluntarily, as fringe benefits for good employees. However, management is becoming seriously concerned about costs. It is questioning Hospital Saving Association and other insurance carriers about the high—often seemingly unnecessary—utilization, and asking what we are doing to help control costs. It wants to know what steps we are taking to evaluate claims, justifiable admissions, and length of stays involving scheduling of services, unit prices, etc.

Necessary Versus Unnecessary Costs

Hospital charges for inpatient care have increased steadily at the rate of about 6% per year for a long time. Hospital Saving Association's figures for 1964, however, show an increase in all charges to its hospitalized subscribers of 8.55% over 1963, the greatest in several years. We recognize the dilemma caused by needed salaries and other factors—which is all the more reason why we must examine diligently for waste, since true costs will rise high enough. People will pay for essential services, but not for waste. Hospital administrators and medical staffs, therefore, should assume leadership in order to assure the people that the costs are actual and medically justifiable.

Blue Cross is eager to help. It is seriously concerned about the allocation of charges to costs—that is, room charges in relation to ancillary charges, each in relation to its proper cost. While total charges increased 8.55% during the year, ancillary services increased 10.7%. We believe that proper accounting of hospital expenses will show that the cost of room, board, and nursing care far exceeds that of ancillary services, and we believe that the public is willing to accept the former but would be resentful if they thought they were being overcharged for extras.

As a step toward solving this problem, Blue Cross favors the establishment of utilization committees to enable the profession to control both the quantity and quality of hospital service. This subject has become one of national discussion. In some areas, it has been a factor in determining Blue Cross approval of a member hospital. Insurance departments are investigating its usefulness and effect on Blue Cross rate increases. There is some opposition to the idea in North Carolina, but Blue Cross is hopeful that many hospital medical staffs will appoint such a committee or expand the admissions committee to incorporate many of its features.

Let us assume that the medical staff of a hospital adopts a practical and effective utilization program and publicly announces that one of its responsibilities is to protect the medical and economic interests of the entire community. The public would know at once that physicians were aware of the need to eliminate unnecessary admissions and services and had publicly assumed this rightful responsibility. Would not this tend to eliminate some of the pressure from subscribers who try to abuse their contract privileges? Blue Cross could carry such an announcement to its insured groups and individual subscribers, and we believe that the people would respond and appreciate such action by the physicians. Blue Cross, the hospital, and the medical staff would then be better fortified to administer strict contract provisions and eliminate some misunderstanding with regard to benefits.

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Blue Cross and Blue Shield encourage the increased use of outpatient and office facilities. Treating in outpatient departments and offices those who do not actually need inpatient care frees hospital beds for those who do, and to that extent reduces the need for additional beds. This policy can have a large impact on total costs.

Hospital Saving Association provides excellent outpatient benefits for accident cases and minor surgery, and the Extended Benefits Endorsement, which includes office and outpatient benefits for necessary x-ray and laboratory services, is the fastest growing segment of our business—about 50,000 net additions per year. So far, however, we can't add an outpatient provision to our basic certificate without extra charge, because this provision has not saved enough in inpatient admissions to offset its own cost and the extra use of the special benefits. With the understanding and cooperation of both the physicians and the public, we have faith that this service can be made to serve as a deterrent to unnecessary inpatient care in the future and thus protect the people from soaring premium rates.

The Physician's Role in Determining Medical Costs

The physician plays a vital role in determining total medical costs. According to the AMA *News* for January 4, 1964, this point was brought out during a recent Chicago conference on "Hospital Costs and Patients' Expenditures." It was agreed that physicians play a major role "in determining how and in what amounts the nation's health care dollars are spent."

"Of each health dollar, 80% is spent as a result of a physician's decision. It is in this area, participants agreed, that the greatest impact on cost reduction can be made. Utilization Committees were singled out as perhaps the most productive approach to the problem by doctors."

Dr. J. Everett McClenehan outlined other areas, including "the ordering of drugs, the ordering of x-rays, the ordering of laboratory tests, effective use of hospital manpower and equipment, and efficient use of beds. (Utilization)."

The voluntary prepayment fund in the United States now amounts to more than $8 billion annually, and it is true that physicians virtually control this vast sum. There are only two methods of prepayment: voluntary or compulsory. Voluntary prepayment is in serious trouble if rates increase indiscriminately. Certainly costs of misuse should not be added to needed costs. Voluntary prepayment would be strangled, thus encouraging more and more government participation in medical care.

We clearly recognize that the physician's position is a delicate one, but we also firmly believe that with the "changing political, economic and social climate" about controls, the freedom that medicine enjoys calls for a new evaluation of responsibility; and that is what we are urging in this paper.

Consider the following as an example of economic impact:

Assuming the average length of stay in the approximately 16,000 short-term acute general hospital beds in North Carolina to be seven days and occupancy 90%. If the length of stay could be reduced by one-fourth day, 27,800 more patients could be served in a year's time. The one-fourth day saved would obviate the addition of 590 new beds. At a cost of $20,000 per bed, an original capital outlay of $11,800,000 and a cost of $8,000 per bed for maintenance, $4,720,000 per year could be saved.

On the basis of the above figures, if an average saving of $3 in laboratory examinations could be effected with medical safety, the result would be $2,330,000. And if a 10% saving in the cost of drugs could be made ($2 per patient), the figure would be $1,550,000. If an average of $1.75 less were charged for x-rays, still maintaining safety, the reduction would be $1,360,000—or a total of $5,240,000.

Expressed in another way, if the cost of such ancillaries could be cut approximately $1 per day, as above, a saving of $5,000,000 would result and 27,800 more patients could secure needed beds. Expressed in still another way, if the ordering of ancillary services, drugs, x-rays, and laboratory tests

could thus be reduced with medical safety and isn't done, we are wasting more than $5,000,000 of the people's money per year.

Cost figures eventually get to Washington and to the entire public, and lead to political agitation and the claim that Government can do all this better and cheaper than it is being done now. This is an example of the competitive factor of voluntary prepayment versus government control, and it puts a tremendous burden on all of us to prove the soundness of the voluntary way. If voluntary methods falter, Government rushes in to close the gap—on its own terms.

We are fortunate that in North Carolina the issue has not reached the point of local agitation as it has in so many other areas, but that point may be nearer than we think. (An example was the close scrutiny of real needs during our last rate hearing for an increase in non-group rates.) We hope we have time to solve many cost problems quietly and equitably, but we are all partners, we need your help, and the time is NOW. Conversation will no longer help; positive action should start. We are thoroughly convinced that "total cost" has been a vital factor in the government's entry into health service for those over 65.

Blue Cross, Blue Shield, and other forms of voluntary prepayment, with more than 145,000,000 Americans participating, have been the main deterrent against the European type of socialized medicine. But the very fact of our "bigness" now causes public concern and enhances the need for more careful evaluation of responsibilities.

We repeat that the physician's position is delicate, for he is primarily responsible for his patient's welfare. Unlike fire insurance, where a man can be sentenced to jail for arson, there is no legal penalty for misuse of a hospital bed. Blue Cross has to depend a great deal on "morality," for there is no way to insure simple desires. This means that physicians are often called upon to decide between needed medical treatment and unjustifiable services demanded by a patient. They are called upon to perform unethical acts to which they are solidly opposed and to violate economic integrity in ways which could easily affect their reputation for professional integrity.

The comprehensive benefits that Blue Cross has tried so conscientiously to provide apparently create "soft spots" for abuse. An example is coverage for private duty nursing, which is sometimes requested for convenience rather medical need. The partners in this program—but especially the hospital, the physicians, and the Plans—should not cravenly refuse to offer these benefits that are so vitally needed by the sick merely because there are a few subscribers who insist on chiseling or who genuinely misunderstand, thus adversely affecting rates for all the rest.

Responsibility for the People's Money

We face a new concept in financing hospital, as well as professional, bills. When 70% of all hospital patients carry some form of prepayment, the old direct patient-hospital-physician relationship in regard to payment for services has changed, so that the patient now pays his bill with a little of his own money plus a lot of other people's money. People in mass from many communities have created a fund from which bills are paid for those who need care. This fund cannot be multiplied; it can only be divided. Therefore it becomes immediately apparent that Blue Cross and other carriers have a positive responsibility to see that the pooled funds are spent, in every instance, in strict accordance with contract provisions. This is not the carrier's responsibility alone; it involves also the hospitals and physicians, because they write the invoices and are equally responsible to the community for the way in which the people's money is spent.

Recently Blue Cross has been criticized for requesting more detailed medical information from hospitals, physicians, and the like. But if an administrator or a physician could see the thousands of incomplete forms and statements we receive, he would realize our need to get adequate information, for we cannot blindly assume liability. We must adhere to contract provisions under each type of subscriber agreement;

otherwise premium rates for each contract would be meaningless.

We and other carries have felt that double or multiple coverage has been a factor in utilization of hospitals and in pressure on physicians for admissions and service. To what extent, we cannot determine exactly, because again we are faced with the fact that this factor is costly only to the extent of medical misuse. Corrective legislation may eventually be passed which will prevent patients from profiting from illness and which might relieve some of the pressure.

Blue Cross is in favor of much more careful planning for future facilities. All competition between hospitals should be eliminated in the best interest of the community. Future need for beds, not necessarily based on population alone, should be carefully analyzed with respect to (1) more efficient use of present beds by careful evaluation of admission and discharge policies, etc.; (2) type of facility—mental, convalescent, and other; (3) expanded outpatient facilities; (4) operating rooms to facilitate better scheduling; (5) duplication of expensive equipment for rarely used procedures in the same area. Another possibility is more consideration of home care, possibly through cooperation of public health and extension services. Still another consideration is the division of total hospital costs between the state, county, city, church, or other sponsoring agent, on the assumption that not all of the "stand-by" facilities should be the responsibility of the sick patient. Nursing and professional education are other such expense factors.

Conclusion

North Carolina Blue Cross and Blue Shield expect to work with the providers, as well as purchasers, of health service in our state to obtain the optimum use of hospitals by the people and to maintain the highest quality of medical care. Some of the current problems seem difficult, but we have no fear that we cannot jointly solve them. We have faith in our physicians, who in the past have never failed to help solve the problems when all the facts laid before them. They know that motives are correct, and they fully realize how much depends on them.

Psychiatric Sequelae of Automobile Accidents

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A variety of psychiatric syndromes following physical trauma have been reported. Of particular importance are those associated with automobile accidents. The authors of the studies reported[1-12] have, for the most part, addressed themselves to individual syndromes which occurred in response to or as sequelae of the trauma. One report considered the differential diagnosis of malingering and neurotic reaction. Another dealt with the occurrence of affective disorders subsequent to automobile accidents[12]. The author of this report has also discussed what is termed the "traumatic neurosis." Few investigators have considered the subject of epilepsy[12], especially a recently described entity often associated with trauma; namely, the 14 and 6 positive spike syndrome[15, 16].

For editorial comment see page 461

Since a comprehensive consideration of the psychiatric sequelae of traffic accidents seems indicated, we have endeavored to describe and discuss the psychiatric complications that may arise as a result of trauma inflicted by automobiles, whether or not the syndromes are or are not the result of con-

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cussion of the brain severe enough to cause unconsciousness[17]. The following disorders are included:

1. Physiologically and anatomically determined dysfunction (delirium, chronic brain syndrome, behavior disorders, the 14 and 6 positive spike syndrome, and epilepsy with seizures).
2. Neurosis (conversion and anxiety reactions, mixed neurosis, "traumatic neurosis," and dissociative reactions).
3. Affective reactions (depressions, elations, and confusional states.
4. Malingering.

Physiologically and Anatomically Determined Dysfunction

The sequelae of accidents considered in this section are almost always associated with trauma to the head and attendant injury to the brain. These disorders can last from a few seconds to months[13].

In the immediate post-traumatic state seizures may occur. Most often they are generalized seizures of the tonic or clonic type. Focal seizures do occur but are usually associated with other evidence of a specific neurologic lesion[13]. Psychiatric symptoms, on the other hand, present as simple confusion or delirium. The latter may develop when the severe confusion clears or may appear immediately after the accident. An illustrative case is presented.

Case 1

A 34-year-old man was involved in an automobile accident and remained unconscious for one hour. While in the hospital he was confused. After being discharged two weeks after the accident, he became more confused and had paranoid ideas. He thought someone was trying to sneak into his house and get his gun. He was quite restless and disoriented.

On entering another hospital three weeks after the accident, he appeared unkempt, answered questions hesitantly, was disoriented, and had rapid fluctuations in his level of consciousness. He had auditory hallucinations of his brother's voice and the voices of people in his home town telling him to do things.

In the absence of delirium, consciousness slowly clears, and if seizures have occurred they will usually cease. Within a few days or weeks the recurrence of neurologic signs or symptoms may indicate the possibility of the development of a subdural hematoma. Psychiatric symptoms such as confusion and depression may accompany hematomas.

Severe cerebral damage may produce the chronic brain syndrome. They may be characterized either by simple deterioration of the mental faculties with disorientation, memory defects, and affective lability, or at times by a Korsakoff-like psychosis with confabulation. Seizures may develop as long as two or three years after the accident.

If the degree of permanent injury is not too severe, a schizophrenic-like state with systematized paranoid delusions, irritability, and hallucinations may be observed. A major disturbance may involve the area of judgment. Variable degrees of memory defect can be observed.

Children may have all of the foregoing disturbances. In young children, however, frequent residual effects are decreased intellectual capacity, the development of the 14 and 6 syndrome, or both. The 14 and 6 syndrome was described first in 1951 by Gibbs[12]. An excellent summary of the presenting symptomatology is that of Hughes and others[16]: pain (headaches or abdominal pain), dysautonomia (prolonged autonomic hyperactivity), and behavioral disorder (hyperkinesis, rage attacks, and impulsivity). Although this syndrome is not always caused by head trauma, 30% of the patients are known to have such a history. In many instances, mental deficiency and the 14 and 6 syndrome occur in the same patient, presumably as the result of the accident. The following case is such an instance.

Case 2

A 6-year-old boy was brought to the clinic because of difficulty in learning in school. Six months previously he had been struck by an automobile and remained unconscious for four days. After regaining consciousness, he was dazed and confused for a week. As he recovered from the acute confusion it was noticed that he was doing things faster and talked loudly and constantly. He had enuresis, was unable to concentrate, and his attention span was shortened. He was difficult to manage and showed some clumsiness. He often waked up during the night and went to talk with his father and mother or began looking for toys. He was irritable and could

no longer get along with his sister. He was stubborn and more boisterous; he seemed to have no fears.

His pre-injury history indicated that all the developmental milestones had been met without delays. He had played with his peers and was tractable and responsive to discipline.

The neurologic examination was normal. His full-scale intelligence quotient was only 66 on the Wechsler scale for children. A sleep-activated electroencelaphogram demonstrated 14 and 6 per second positive spikes.

Neurotic Disorders

"Neurotic reactions" frequently follow automobile accidents. The chief characteristic of these disorders as defined in the Diagnostic and Statistical Manual[4] is anxiety which may be felt and expressed directly or unconsciously and automatically controlled by various psychologic mechanisms—introjection, conversion, or displacement. Longitudinal histories on neurotic individuals may present evidence of periodic or constant maladjustment of varying degrees stemming from early life. The symptom-complexes observed following trauma seem to run the gamut of neurotic reactions (conversion, fear states, phobia and depression, as well as dissociative and obsessive-compulsive syndromes).

Conversion reactions are commonly seen and usually develop soon after involvement in an accident in which little if any true injury was incurred. Hemianesthesia, hemiplegia, blindness, and hypochrondriacal symptoms are the common complaints and findings in these reactions. At least one case treated by us began with a conversion reaction in the form of paraplegia (which was reversed) and then later, under further stress, was manifested as a dissociative reaction.

Case 3

A 30-year-old man overturned his car. No immediate injury was apparent. He was amnesic with regard to the accident. Twenty-four hours later he was paraplegic, but recovered within several days and was discharged from the hospital. An episode of hemiplegia resulted in his readmission to the hospital, where he refused psychiatric treatment. He was angry and his symptoms grossly increased. He became paranoid, threatening to sue the physicians and the hospital. Committal became necessary because of his refusal to be hospitalized.

After admission the patient improved rapidly on receiving physical therapy. Results of neurologic examinations were consistently negative. His past history indicated an unstable work record and a similar episode four years previously.

The dissociative reaction, according to the Diagnostic and Statistical Manual, represents a type of gross personality disorganization formerly called hysteria. It may cause aimless running or "freezing." "The impulse causing the anxiety may produce depersonalization, stupor, fugue, amnesia, paranoid ideas," etc.[4]

Fear and phobic reactions also frequently follow accidents. Here the patient tries to keep anxiety at a minimum by avoiding the anxiety-provoking stimulus, usually a car or other vehicle.

In "neurotic" depressive reactions there may be self-depreciation. It is true that in many cases the reaction is precipitated by the accident and is commonly associated with anxiety. A past history of similar symptoms in response to minor stresses may be obtained. The patient may, in some cases, consider himself to be "nervous."

In the so-called "traumatic neurosis" the above symptoms sometimes appear. The symptom-complex that has impressed us most in our study of traumatic neurosis has been depression, anxiety, fear, and at times conversion symptoms. Depressive symptoms are almost always associated with the biologic concomitant of depression. As a syndrome this disorder is similar to combat neurosis. Table 1 gives a comparison of the symptoms occurring in each. It may be observed that the major differences lie in the biologic concomitants, notably restlessness and sleep disturbances. We have not satisfied ourselves that this complex is different from other self-limiting affective disorders.

Malingering

Although malingering is often suspected following automobile accidents, it is difficult to prove. There are, therefore, no reliable statistics regarding its incidence. Since

Table 1
Comparison of Symptoms in Accident and War Neuroses

Symptoms	No. of Patients with Symptoms 24	Percent of Total	Percent of Patients in War Neurosis Study (5)
Depression	17	71	83
Restlessness	7	29	74
Irritability	14	58	65
Headaches	10	42	
Terrifying dreams	5	21	48
Sleep disturbances	18	75	46
Anxiety and fear attacks	9	37	42
Sex disturbances	10	42	32

it is necessary to consider this diagnosis, some criteria are needed to serve as a yardstick for differentiating malingering from true neurotic symptoms. Davidson[14] has suggested the following:

1. There is a dissociation of the ability to work and play in the malingerer.
2. The neurotic follows prescribed treatment regimens faithfully; the malingerer does not.
3. If the patient has been a responsible, honest, reliable, adequate person, he is usually not a malingerer. The converse is true.
4. Preoccupation with the frightening aspects of the illness suggest neurosis.
5. Evidence that the patient's symptoms are present when he is observed and absent when he is not is proof of malingering.
6. Exaggeration of post-traumatic symptoms beginning during hospitalization further suggests neurosis.
7. Psychologic testing may be helpful in the differential diagnosis.
8. The malingerer does not accept psychiatric or surgical treatment.
9. If the patient refuses employment (unless advised by council) that he is capable of performing, he usually is malingering.
10. The neurotic is eager to be examined and re-examined.

The foregoing guides are not hard and fast rules; exceptions may be found to all of them. However, a careful review of the patient's history may indicate that enough of the criteria are met for a diagnosis of malingering to be assumed.

The following case is presented to illustrate some of the signs of malingering:

Case 4

A 39-year-old white man, a car salesman, was involved in a traffic accident in which his car was hit from behind. He allegedly was stunned momentarily, then turned to get out of the car and collapsed. An ambulance was called but the patient recovered and refused to get in. He subsequently claimed that he remembered very little of the circumstances surrounding the accident. He stayed in the hospital 16 days, complaining of pain in the neck, shoulder, and back. After discharge he was treated with physiotherapy. He returned to his job but alleged that he was unable to work because of back pain.

One and one-half years later he was seen for neurologic and psychiatric evaluation. At that time he was complaining of low back pain radiating into his legs. The neurologic examination revealed no evidence of organic involvement. He had sought several examinations and had not returned to work even after being told that he could do so. He had a history of previous psychiatric disorder while in military service, and had been treated at a Veterans Adimnistration hospital. He had also been involved in one and perhaps two other accidents, and had collected damages in at least one of them. He was also reported to be an alcoholic and to have abused his wife.

Affective Disorders

Physical trauma is one of the events that often precipitate a depression, ranging from mild to severe. If the symptoms are mild, they often simulate neurotic reactions[18]. Usually it is possible to differentiate a self-limiting illness from a neurotic depression by determining that the patient had a well

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balanced, stable, premorbid personality, and by observing that purely depressive symptoms constitute the primary complaints. We believe that it is worth while to attempt to differentiate the purely depressive syndromes from neuroses accompanied by some depression, since the affective disorders usually carry a better prognosis than do the neurotic reactions.

Case 5

A patient, aged 21, was referred because of mood changes following a severe head injury incurred in an automobile accident. About one month after being discharged from the hospital, he began to have periods of elation and depression lasting from a few minutes to a few hours. This depression sometimes occurred twice a day, and was associated with a fear of becoming suicidal. He had no crying spells, but at times his illness interfered with his work. He was uncooperative and had flare-ups of temper. He ruminated about returning to college.

There were obvious discrepancies between the patient's story and his family's accounts of his illness, probably due to the patient's attempts to minimize his symptoms. He claimed that he slept well, but his family reported insomnia, irritability, and aversion to noise. His mood was described as alternately depressed and elated. There were no serious disturbances in the content of thought. Examination of the sensorium was negative. His symptoms cleared after one and a quarter years.

Summary

The foregoing discussion of the psychiatric complications following automobile accidents attempts to outline the major diagnostic features of the physical or emotional trauma resulting from the accident. Epilepsy, delirium, 14 and 6 per second positive spikes, and chronic organic reactions follow injury to the brain. Neurosis, affective disorders, and malingering are associated with real or fancied emotional trauma.

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Medical Corps of the Confederate Army

WALTER WARD, M.D.

WINSTON-SALEM

When the South seceded from the Union to form the Confederate States of America, one of the first acts by Congress was to establish an army. As with any military organization, it was necessary to include provisions for a medical corps. The act calling for authorization of such a department was passed by the Confederate Congress on February 26, 1861.

This department was set up so that the Surgeon General was charged with the administrative responsibilities of the entire corps, the government of hospitals, and the regulations of all medical officers in the field. Under the Surgeon General were medical directors for each army, whose duty it was to govern all medical personnel of that army and its hospitals. Each division of this corps was to have one chief surgeon, each brigade one senior surgeon, and each regiment one surgeon and assistant surgeon. Each general hospital was to include a director or chief surgeon and three assisting surgeons, a steward—usually a medical student or druggist—a ward master, one nurse for every 10 beds, one matron for every 20 beds, and one cook for every 30 patients.

During the entire war the total forces of the Confederate Army did not exceed 600,000 men, and to care for this number there were about 3,000 medical officers. In order to understand the task that faced them, one must realize that "more than three million cases of wounds and diseases were cared for by the officers of the Medical Corps during the Civil War." This means that each soldier must have been wounded or ill about six times during the war. In addition, 53,973 Confederate soldiers were killed on the battlefield and 146,000 more died of wounds or disease.

The Surgeon General appointed by President Davis was Samuel Preston Moore, a former surgeon in the U. S. Army. The rigid discipline which he imposed in his department was often criticized by his fellow officers. According to all records, however, he not only ably directed the medical department during the entire war, but supervised the preparation of "A Manual of Military Surgery" and the *Confederate States' Medical and Surgical Journal.*

Methods of Treatment

The "Manual of Military Surgery" set forth the principles of surgery employed during the Civil War. It was welcomed with enthusiasm, for when the War started Southern doctors found that books on military surgery were at a premium. Among other useful information contained in these manuals were the theories regarding the recognition and treatment of such diseases and conditions such as shock, tetanus, erysipilas, pyemia, and hospital gangrene. The sections dealing with the treatment of gunshot wounds, hemorrhage, fractures, and the techniques of resection, amputation and ligation were also needed, because few doctors had brought any of their books with them.

The authors of this manual considered abdominal wounds fatal, and undertook to do "little more than to sooth and relieve the patient by the administration of opiates." In chest wounds, hemorrhage was considered the chief cause of death, and the manual states: "Hemorrhage from vessels belonging to the costal parietes should be arrested by ligation, hemorrhage from the lining itself by opium, quiet, cold applications and, if the patient be sufficiently strong, bleeding from a large vein until syncope intervenes."

For wounds to the head, trephining was resorted to "only when there was reason for concluding that depressed bone was leading to permanent interruption of cerebral function, or that an abscess had formed within reach, and was capable of evacuation." Wounds to the extremities constituted the

majority of the injuries incurred, and accounted for most of the operations performed.

The wounded were first treated in the field by front line surgeons and later moved to the hospitals, where the wounds were cleaned, foreign bodies removed, amputations performed, splints reapplied, and and dressings changed.

Amputations were numerous, and the associated mortality rate ranged from 30-60 per cent. The scenes in and around field hospitals during an engagement were grim. One soldier who visited a field hospital near Atlanta during the summer of 1864 stated that there was nothing in his whole life that he remembered with "more horror than that pile of legs and arms that had been cut off our soldiers." He concluded his comments on the hospital as follows:

> It was the only field hospital that I saw during the whole war, and I have no desire to see another. Those hollow-eyed and sunken-cheeked sufferers, shot in every conceivable part of the body; some shrieking, and calling upon their mothers; some laughing the hard, cackling laugh of the sufferer without hope, and some cursing like troops; and some writhing and groaning, as their wounds were being bandaged and dressed. I saw a man, who had lost his right hand, another his leg, then another whose head laid open, and I could see his brain thump, and another with his under jaw shot off; in fact, wounded in every manner possible.

The assistant surgeon in charge of the medical corps on the field of battle carried a knapsack containing a small case of instruments, needles, ligatures, chloroform, morphine, alcoholic stimulants, tourniquets, bandages, lint, and splints. According to one man who filled this post, service consisted chiefly of the application of plaster and bandages, the administration of stimulants and the placing of badly wounded individuals in the ambulances. No elaborate procedures were undertaken on the battlefield except when urgently needed. Members of the medical corps in the field or elsewhere were strictly forbidden to engage in any military action which was not in the line of duty. They were unarmed and wore a bandage to distinguish them from the rest of the command.

Scarcity of Medical Supplies

One of the greatest problems that faced Confederate surgeons was the scarcity of medical supplies and drugs. With each engagement of troops on the field of battle the need for opiates, anesthetics, and stimulants became more acute. Those drugs that were available sold at a high price; for example, quinine was $22.00 per ounce, morphine $28.00 a dram, sodium bicarbonate $3.00 a pound, and French brandy $52.00 a gallon. In an attempt to make up for this deficit of drugs and medical supplies, many Southern cities attempted drug manufacture. This often failed because there were no raw materials.

The most reliable source for needed supplied was the blockade runner. Southern ladies wearing petticoats, quilted in secret in some Northern city and containing morphine and other medicines, crossed the Mason-Dixon line to bring these supplies to Southern surgeons. There were also Southern agents in many foreign countries who promised cotton in exchange for drugs that got through the blockade of Northern ships. Finally, in a desperate effort to supply the needed medicines, Francis Parcker, a surgeon, published a book on indigenous medical plants of the South. Some of the plants mentioned in this book were cottonseed tea to replace quinine, bloodroot and wild cherry to replace digitalis, bark of American hemlock to replace opium, and dandelion to replace calomel. For diarrhea, a mixture of blackberry root and sweet gum bark was the remedy; wild jalop was used to cure constipation; dogwood bark to treat malaria; and willow bark to stop a fever.

The resourcefulness of the Southern surgeon was unique not only in supplying drugs but also in making up for lack of adequate surgical tools. Dr. Hunter McGuire, in his memoirs as a medical surgeon, stated: "The pliant bark of a tree made for me a tourniquet; the juice of the green persimmon, a styptic; a knitting needle, with its point sharply bent, a tenaculum; and a pen knife, a scalpel and bistoury." He goes on to say of another surgeon:

probably more important than is generally realized, for it is hard to measure such things—a common problem in psychiatry. The continuing argument over whiplash injury is a case in point, for there is one group which would assign that syndrome to the psychiatric field, and others to orthopedic surgery and neurosurgery. Attention has also been called recently to other less obvious sequels of automobile accidents, like contusion of the myocardium, and the electrocardiographic changes which can be detected following accidents involving chest injury. As we probe more deeply still, other corners will be illuminated.

All this concern stems from our automobile-centered society, about which great amounts have been written. There is no need to bewail its existence or to berate the machine, as we all realize when we leave the office and get into our own cars. That being the case, we have to learn all we can about the damage that cars do to our patients, and therefore we thank Dr. Wilson and his colleagues for their contribution. Next we hope someone will discuss the psychiatric aspects of the causation of automobile accidents.

* * *

THE SCHLOCKMEISTERS

The word may be mispelled, or it isn't in available dictionaries, but the meaning as it comes across in *Mad* magazine and other learned journals in this field is that a schlockmeister is one who has an affinity for junk. Some have called antique collectors by similar terms, but usage indicates that a schlockmeister is not so refined as to collect antique junk, preferring carnival prizes, items thrown to the audience at fairs, movie parties, TV shows, and similar gatherings.

The suitability of the word struck home in the course of a walk about the commercial exhibits at the recent AMA meeting in New York. When the exhibits opened the first afternoon, the scene was reminiscent of a land rush. Families spilled out, deploying according to plan, gathering boxes of detergents, bottles of various fluids, bars of soap and similar schlock, meanwhile gulping tiny volumes of orange juice or other beverages.

It was not altogether an enjoyable scene for an observer. Here was an affluent group, pushing and shoving for items costing from one cent up, like refugees at dockside. Surely there is some more orderly way for the commercial exhibitors to get their message across. Some of them mail samples rather than supply them at the meeting; this suppresses the avidity. Others concentrate on spectacle; which also breeds a more suitable scene. Perhaps there is a large sentiment for the homesteading spirit displayed that Sunday, accounting for the continuation of sample-dispensing. There is also some sentiment, involving at least one person, for the AMA to rule out giveaways, sparing the manufacturers this burden and relegating shopping bags to the supermarket.

* * *

CONFEDERATE MEDICINE

Now that the tumult of the centennial of the War Between the States is dying down, more quickly than the event itself, Dr. Ward's paper on Confederate medicine might seem ill-timed. Historically, however, assessments of war medicine have best been made during a long period of years following the conflict.

The Civil War is generally accounted one that produced much good for medicine. One of the bad aspects is that so little was remembered when the next conflict came along, just as lessons learned in World War I had to be learned again in World War II. All fervent wishes aside, one never knows when this knowledge must be summoned up again. While this JOURNAL will not attempt a comprehensive study of military medicine, brief papers in the field may implant one useful fact in someone, and cannot fail to stimulate our many historically-minded readers.

The President's Page

TETANUS: A PREVENTABLE DEATH

A few years ago my attention was directed to an elderly man found early on a subzero morning lying in a gutter. It was obvious that he had suffered severe exposure, frostbite, and, we learned, the results of excessive consumption of "white lightning." Several toes and fingers became gangrenous and showed the characteristic lines of demarcation. His condition progressively worsened from unrecognized cause and he died; died of tetanus. This was a preventable death.

In his youth this patient did not have the benefit of our current laws. Since 1957 we have required that our children be immunized against tetanus (as well as small pox, diphtheria, whooping cough, and, in 1959, polio), but there are many people lacking proper immunization who are still faced with this preventable hazard to their well-being. In North Carolina last year there were nine victims of this malady. In the United States, in 1963, 210 deaths were attributed to this preventable disease. Even with our existing laws and our understanding of this disease process, we continue to have a large segment of our population "unprotected."

We assume that all children born since 1956 and all members of our Armed Forces have had basic immunization against tetanus. We are also aware that a large segment of our people have secured this immunization on a voluntary basis. Yet it remains true that the medical profession has not provided sufficient guidance for our people to create total immunization of our population against this preventable scourge.

Our major effort should be directed toward *prevention* — prevention before the wound is incurred. Every citizen of every state should be immunized against tetanus. This disease has been reported as a fatal complication of elective surgical procedures; as a contributory cause of death in acute and chronic disease; as a primary cause of death in the new-born; as well as a result of injuries inflicted by an aroused gamecock. The veterans of World War II and Korea are enjoying the protection of modern medicine, a protection available to all. A single subcutaneous injection of 0.5 cc of tetanus toxoid, fluid or alum precipitated, will restore tetanus antitoxin blood levels sufficiently to be effective for years to come.

At this time immunization of all North Carolinians, in fact of all Americans, would not be impossible. With the leadership of your Medical Society, and the AMA and other medical organizations, massive inoculation programs could be accomplished through industrial, agricultural, labor, civic, and school organizations.

Every individual should be given a record of his immunizations, including tetanus. This would serve as a reminder of the time for the next booster and would prevent his being injected with tetanus antitoxin when it is not necessary. The AMA provides records for immunizations. Patients appreciate these records.

On this page I would not presume to provide instruction for what my colleagues already know. The subject is discussed only to emphasize its importance.

I wish also to remind physicians that a prophylaxis be considered at the time of injury. Tetanus antitoxin, equine or bovine, is contraindicated in most fresh wounds. The classical recommendation of 1,500 units gives inadequate protection which is dissipated within a few days. Systemic allergic reactions occur in about 5% of patients so treated, even though sensitivity tests were negative. If a patient has had a full tetanus toxoid immunization in the past 20 years, sufficient protection can be reinduced by prompt subcutaneous injection of 0.5 cc fluid tetanus toxoid. If the patient has not been immunized before, a decision must be made toward active or passive protection.

With a strong likelihood of tetanus developing in the wound, the patient may be passively immunized with tetanus immune globulin. This is prepared from human blood plasma with a higher titer of tetanus antitox-

in. Passive protection from this material lasts about four weeks. Active immunization can be started at this time with a different syringe in a different area. If tetanus immune globulin is not available, appropriate antibiotics (penicillin and tetracycline) can be given and active immunization with tetanus toxoid along with other symptomatic treatment begun.

The spectacular results in our efforts against polio indicate what we can accomplish against tetanus. I would hope that organized medicine and individual doctors in North Carolina would unite in providing total immunization, thus demonstrating and proving that *tetanus is preventable.* In so doing, we add to our preparedness for natural or man-made disaster.

GEORGE W. PASCHAL, JR., M.D.

N. C. HOSPITAL KEEPS ACCURATE NARCOTIC CONTROL

One major hospital problem—control of narcotics to be administered to patients—can be solved easily and accurately when the drugs are kept in single dose containers or tablets, a hospital pharmacist demonstrated in a scientific exhibit for the American Hospital Association convention recently.

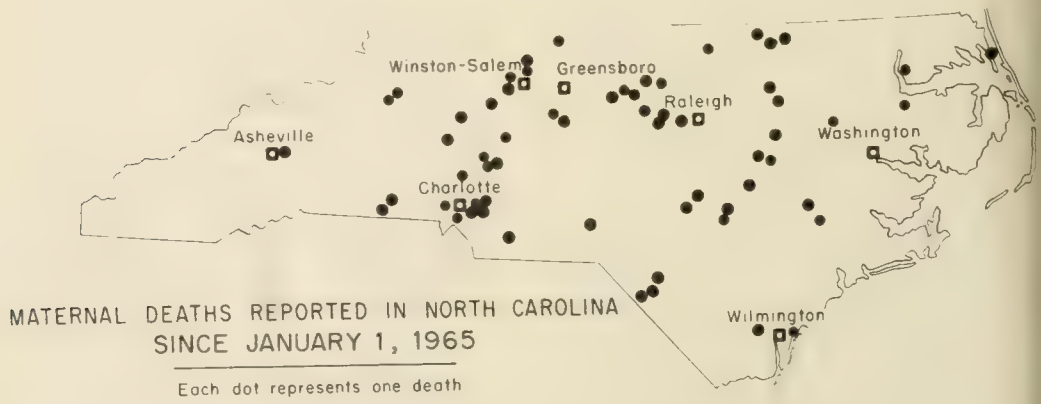
Joanne B. Hambright, chief pharmacist for the Southeastern General Hospital, Lumberton, N. C., presents her findings after two years experience using the system in that 265-bed hospital. Four brief hospital forms provide all the needed records, she reports.

Formerly, the pharmacist and the nurses had to spend hours inventorying, distributing and receiving narcotics from the hospital pharmacy, Mrs. Hambright's exhibit indicated. Other disadvantages under the old system were: large drug inventories which would invite "pilferage;" increased chance for medication errors; burdensome record keeping; and greater storage space required.

By applying unit-dose dispensing methods and arranging to make weekly trips to distribute narcotics to nurse stations, Mrs. Hambright not only saved a great deal of time for the nursing staff but also developed a narcotic control system which is "accurate, fool-proof, simple and economical."

Narcotics for injections are supplied in individual Tubex Sterile Cartridge-needle Units (Wyeth Laboratories, Philadelphia) so that they can be counted easily and accurately for inventory control. Tablets of narcotics for oral medications are kept in plastic counting units. (Narcoticounters from American Hospital Supply Co.) The pharmacist can move supplies of these two unit-dose dispensing systems on a cart to the nursing stations in the hospital.

The drug records required may be increased under new legislation on controls for barbituates and amphetamines Mrs. Hambright notes. This unit-dose system, using Tubex and plastic dispenser for tablets, can be readily expanded to provide accurate and economical controls for these and most hospital drugs, she indicated.



MATERNAL DEATHS REPORTED IN NORTH CAROLINA
SINCE JANUARY 1, 1965

Each dot represents one death

WHEN MOTHER'S IRON ISN'T UP TO MOTHERHOOD

IN BRIEF: **ACTIONS AND USES:** A single dose of Imferon (iron dextran injection) will measurably begin to raise hemoglobin and a complete course of therapy will effectively rebuild iron reserves. The drug is indicated only for specifically-diagnosed cases of iron deficiency anemia and then only when oral administration of iron is ineffective or impractical. Such iron deficiency anemia may include: patients in the last trimester of pregnancy; patients with gastrointestinal disease or those recovering from gastrointestinal surgery; patients with chronic bleeding with continual and extensive iron losses not rapidly replenishable with oral iron; patients intolerant of blood transfusion *as a source of iron;* infants with hypochromic anemia; patients who cannot be relied upon to take oral iron.

COMPOSITION: Imferon (iron dextran injection) is a well-tolerated solution of iron dextran complex providing an equivalent of 50 mg. of elemental iron in each cc. The solution contains 0.9% sodium chloride and has a pH of 5.2-6.0. The 10 cc. vial contains 0.5% phenol as a preservative.

ADMINISTRATION AND DOSAGE: Dosage, based upon body weight and Gm. Hb./100 cc. of blood, ranges from 0.5 cc. in infants to 5.0 cc. in adults, daily, every other day, or weekly. The total iron requirement for the individual patient is readily obtainable from the dosage chart in the package insert. Deep intramuscular injection in the upper outer quadrant of the buttock, using a Z-track technique, (with displacement of the skin laterally prior to injection), insures absorption and will help avoid staining of the skin. A 2-inch needle is recommended for the adult of average size.

SIDE EFFECTS: Local and systemic side effects are few. Staining of the skin may occur. Excessive dosage, beyond the calculated need, may cause hemosiderosis. Although allergic or anaphylactoid reactions are not common, occasional severe reactions have been observed, including three fatal reactions which may have been due to Imferon (iron dextran injection). Urticaria, arthralgia, lymphadenopathy, nausea, headache, and fever have occasionally been reported. Initial test doses of 0.5 cc. are advisable.

PRECAUTIONS: If sensitivity to test doses is manifested, the drug should not be given. Imferon (iron dextran injection) must be administered by deep intramuscular injection only. Inject only in the upper outer quadrant of the buttock, not in the arm or other exposed area.

CONTRAINDICATIONS: Imferon (iron dextran injection) is contraindicated in patients sensitive to iron dextran complex. Since its use is intended for the treatment of iron deficiency anemia only, it is contraindicated in other anemias.

CARCINOGENICITY POTENTIAL: Using relatively massive doses, Imferon (iron dextran injection) has been shown to produce sarcoma in rats, mice and rabbits and possibly in hamsters, but not in guinea pigs. The risk of carcinogenesis, if any in man, following recommended therapy with Imferon (iron dextran injection) appears to be extremely small.

SUPPLIED: 2 cc. ampuls, boxes of 10; 5 cc. ampuls, boxes of 4; 10 cc. multiple dose vials.

in iron deficiency anemia for rapid and predictable replacement of iron reserves

imferon®

(iron dextran injection)



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approximating the diuretic efficacy of meralluride

METAHYDRIN®

(trichlormethiazide)

To determine the relative efficacy of thiazide diuretics in congestive heart failure, Metahydrin (trichlormethiazide) and three other thiazides were measured against Mercuhydrin® (meralluride injection)—the standard diuretic. "The results leave little doubt that the diuretic efficacy, that is, the 'ceiling effect' in these terms, is not the same for different thiazides."* The assays ranged from about 40% of the effectiveness of Mercuhydrin through 67%, 77% to 90% for Metahydrin. The latter two values were thought to be significantly different from the lowest value and to be therapeutically important.

*Gold, H., *et al*: Closed Panel Conference: Present Status of the Management of Congestive Failure and Advances in Diuretic Therapy, Journal of New Drugs, 1:177, July-August, 1961.

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Milwaukee, Wisconsin 53201

IN BRIEF: ADMINISTRATION AND DOSAGE: One 2 mg. or 4 mg. tablet once or twice daily. In acute, severe decompensation, Mercuhydrin® (meralluride injection) may be necessary initially.

PRECAUTIONS: As with all effective diuretics, vigorous therapy may produce electrolyte depletion. Patients with severely reduced renal function should be observed carefully since thiazides may be contraindicated. Care should be taken with patients predisposed to diabetes or gout. Patients with a tendency to potassium deficiency, as in hepatic cirrhosis or diarrheal syndromes, or those under therapy with digitalis, ACTH, or certain adrenal steroids, also should be watched carefully.

SIDE EFFECTS: Nausea, flushing, constipation, skin rash, muscle cramps and gastric discomfort have been occasionally noted; rarely thrombocytopenia and bone marrow depression, photosensitivity, cholestatic jaundice, pancreatitis, perimacular edema, gout and diabetes have been caused by administration of thiazides.

CONTRAINDICATIONS: Complete renal shutdown; rising azotemia or development of hyperkalemia or acidosis in severe renal disease; demonstrated hypersensitivity.

HOW SUPPLIED: Bottles of 100 and 1000 tablets.

Bulletin Board

Coming Meetings

North Carolina Academy of General Practice—Jack Tar Hotel, Durham, October 31-November 2.

North Carolina Pediatrics Society—Mid Pines Club, Southern Pines, November 5-6.

North Carolina Governor's Council on Occupational Health, Ninth Annual Occupational Health Conference—Queen Charlotte Hotel, Charlotte, November 9-10.

Third International Conference on Hyperbaric Medicine—Duke University Medical Center, Durham, November 17-20.

Ninth Annual Symposium on Endocrinology—University of North Carolina School of Medicine, Chapel Hill, November 18-19.

Watts Hospital Symposium—Watts Hospital, Durham, February 18-19, 1966.

North Carolina Mental Health Association—Queen Charlotte Hotel, Charlotte, March 3-4, 1966.

New Members of the State Society

Drs. Stuart Joel Abrahams, ObG, 1004 N. Elm St., Greensboro; Albert Oscar Griffin, I, 1020 Irving St., Winston-Salem; Nathaniel Silon, R, 215 Plymouth Ave., Winston-Salem; Benton Sapp Satterfield, ObG, 2113 Clark Ave., Raleigh; William Garrison McCuen, 1089 Hendersonville Rd., Asheville; John Walter Cochran, ObG, Box 809, Sanford; Andrew John Kapcar, Path, 207 E. Lebanon St., Mt. Airy; Thaddeus Harris Pope, ALR, McPherson Hosp., Durham; Edwin Jacob Lilly, Anes, 2957 Welcome Dr., Durham; George Walters Hamby, 90 Maxwell Rd., Chapel Hill;

Also, Drs. James Joseph Thomas, Pd, 10 Watkins Dr., Morganton; David Lee Kelly, Jr., N, N. C. Bapt. Hosp., Winston-Salem; Harry Karrick Daugherty, S, 1850 E. 3rd St., Charlotte; Hugh Mason Foster, S, 1012 Kings Dr., Charlotte; Hervey Winthrop Mead, P, 225 Hawthorne Lane, Charlotte; John Vaughan, Path, Charlotte Mem. Hosp., Charlotte; John George Wingert, ObG, 1337 Romany Rd., Charlotte; Joe Harris Woody, Oph, 1012 Kings Dr., Charlotte; Lyndon Ulyssess Anthony, NS, 1018 Prof. Village, Greensboro; Hal Judd Rollins, Oph, 348 N. Elm St., Greensboro; James Mobley Lee, S, 1016 Prof. Village, Greensboro.

News Notes from the Duke University Medical Center

The third International Conference on Hyperbaric Medicine, sponsored by the Duke University Medical Center and the National Academy of Sciences, National Research Council, will be held at Duke University, November 17, 18, 19, and 20.

Prominent scientists from at least 12 foreign nations, more than 30 American medical centers, the National Institutes of Health, Army and Navy medical centers, and the School of Aerospace Medicine will deliver talks during the meeting.

Their topics will range from the use of hyperbaric oxygenation to study man's ability to live in space and below the sea, to its use in treating diseases such as heart attacks, strokes, and cancer.

A special feature of the conference will be a lecture on "Undersea Living and Exploration," by Captain Jacques-Yves Cousteau, internationally known oceanographer. A panel discussion on deep-sea living will follow his talk. The panel will be moderated by Captain George Bond of Bat Cave, officer in charge of the U. S. Navy Sea Lab II project now under way off the coast of California.

Dr. Ivan W. Brown, Jr., professor of surgery at Duke, is president of the conference.

* * *

Dr. Barnes Woodhall, vice provost of Duke University, has returned from Europe, where he attended two meetings of the World Federation of Neurological and Neurosurgical Societies and reviewed key developments in Italian neurosurgery.

In August he attended the executive meetings of the Third International Congress on Neurological Surgery held in Copenhagen and was a member of the panel to discuss special scientific interests. One of these areas is hyperbaric medicine, in which Dr. Woodhall is now engaged in research.

After traveling to Rome for a look at Italian brain surgery, he flew to Vienna where he participated in the general sessions of the International Congress on Neurology.

* * *

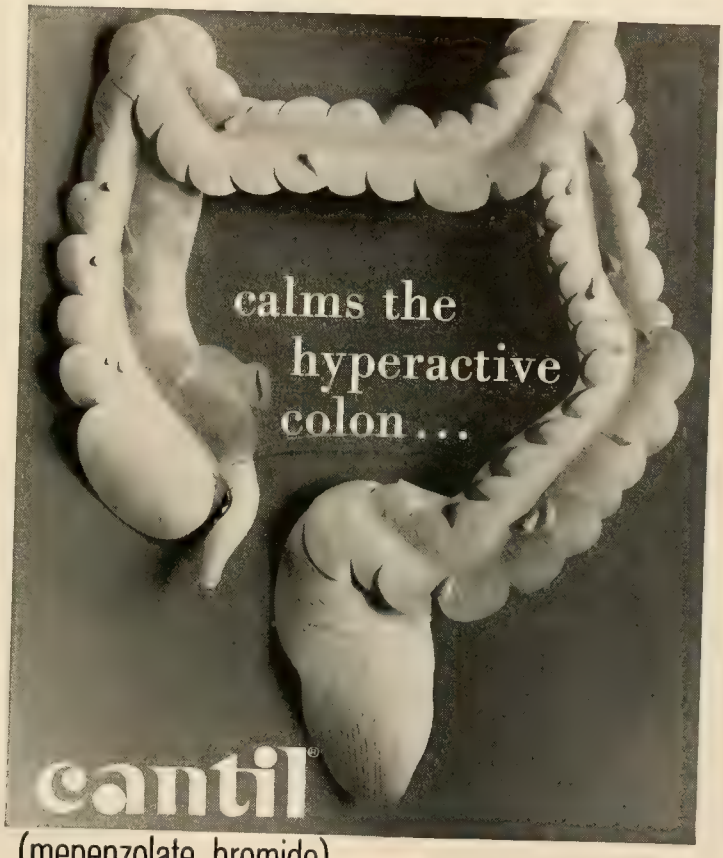
Duke University and the University of North Carolina at Chapel Hill jointly announced the beginning of a Peace Corps training program for doctors, their wives and families.

Begun in mid-July, the program is sponsored by a $194,300 grant and is designed to provide volunteers with 12 weeks of special training.

Dr. William J. A. DeMaria, professor of preventive medicine at Duke Medical Center, is project director.

The first training program of its type for medical doctors and their families in this country, the school will prepare the physicians and their families for service in India, Afganistan, Iran, Turkey, Tunisia, Ethiopia and Malawi. They will see two years service in the country of their choice.

The pilot project is expected to serve as a model for future medical training programs. Participating doctors divide their efforts between health education, preventive and curative medi-



(mepenzolate bromide)

helps restore normal motility and tone

Cantil (mepenzolate bromide) works in the colon. In irritable colon, spastic colon, ulcerative colitis and other functional and organic colonic disorders, it acts to:

- control diarrhea/constipation
- relieve spasm, cramping, bloating
- make patients more comfortable

with little effect on stomach, bladder or other viscera.

"In 40 of 44 cases of irritable or spastic colon, Cantil [mepenzolate bromide] or Cantil with Phenobarbital reduced or abolished abdominal pain, diarrhea and distention and promoted restoration of normal bowel function . . . Cantil [mepenzolate bromide] proved to be singularly free of anticholinergic side-effects. Blurring of vision or dryness of the mouth were occasionally seen and were usually managed with a reduction in dosage. Urinary retention, noted in two cases was eliminated in one by reducing dosage."[1]

IN BRIEF:

One or two tablets three times a day and one or two at bedtime usually provide prompt relief. Cantil with Phenobarbital may be prescribed if sedation is required.

Dryness of the mouth or blurring of vision may occur but it is usually mild and transitory. Urinary retention is rare. Caution should be observed in prostatic hypertrophy—withhold in glaucoma. Cantil with Phenobarbital is contraindicated in patients sensitive to phenobarbital.

Supplied: CANTIL (mepenzolate bromide)—25 mg. per scored tablet. Bottles of 100 and 250.

CANTIL with PHENOBARBITAL—containing in each scored tablet 16 mg. phenobarbital (warning: may be habit forming) and 25 mg. mepenzolate bromide. Bottles of 100 and 250.

1-Riese, J.A.: Amer. J. Gastroent. 28:541 (Nov.) 1957

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cine. They and their families are also receiving language training for their particular country.

* * *

A new training program aimed at making medical services more readily available to patients and at easing the shortage of personnel was announced recently at Duke Medical Center.

The program to train "physician's assistants" who will be similar to military medical corpsmen will be one of four medical training programs to be set up with the aid of a five-year $900,000 grant from the Department of Health, Education and Welfare.

The other programs will involve:

—Training of hyperbaric oxygenation chamber technicians in the operation and maintenance of the high-pressure chambers, one of medicine's newest tools.

—Two medical training programs, one in predoctoral and the other in postdoctoral hyperbaric oxygenation.

The "physician's assistant" program will represent a new concept in paramedical education, according to Dr. Barnes Woodhall, vice provost for medical affairs.

* * *

Duke Medical Center conducted its first Cleft Lip-Palate Summer School in July.

During the month-long course 30 boys and girls lived in a University dormitory, ate in the student cafeteria and had the run of the campus . . .

The age 10-18 group was pre-enrolled through the Duke Cleft Lip-Palate Clinic held each Wednesday afternoon where each of the children received treatment of corrective surgery.

With Duke University, the clinic was sponsored by the Crippled Children's Services of North Carolina, the North Carolina Fund who supplied counselors, and a professional staff of volunteers from Duke Medical Center.

* * *

Dr. Lenox Baker has been renamed to the State Board of Health by Gov. Dan K. Moore.

Dr. Baker, Duke orthopaedic surgeon, has served on the health board since 1956 when he was named to fill an unexpired term. He was renamed to the post by Gov. Luther Hodges for a four-year term and has served continuously since.

Chief of the division of orthopaedic surgery at Duke, Dr. Baker has held some 100 administrative and advisory posts at national, state and local levels.

* * *

Dr. Frank H. Bassett, III has been awarded a two-year grant by the Easter Seal Research Foundation for research on Legg-Perthes' Disease, a crippler of children.

An orthopaedic surgeon, Dr. Bassett received $10,000 in July for the first year of study. The presentation was made by Clarence E. Whitfield, trustee for the National Society for Crippled Children and Adults. Dr. Bassett is an assistant professor of orthopaedic surgery.

* * *

A Duke University immunologist served as president of the "Conference and Workshop on Histocompatibility Testing" held in Leiden, Netherlands, Aug. 15-21.

Dr. Bernard Amos, working under a $786,000 National Institutes of Health grant, heads the immunology and tissue matching portion of a five-year study at Duke. The program marks the first major effort at cross-matching of tissue.

The organ transplant team recently performed its first kidney transplant using five different tissue matching methods as a prelude to the operation. Earlier this year Dr. Amos was named chairman of a national advisory committee for collaborative research in the immunology of organ transplantation.

Dr. Chester M. Zmujewski and Dr. Richard S. Metzgar, along with Dr. Amos, delivered scientific papers during the Histocompatibility Testing Conference in the Netherlands.

* * *

Duke Medical Center was host to three members of the American Legion's Central Headquarters in Washington, D. C. invited to take a close look at the Veterans Hospital facilities and services in Durham.

On the tour were Dr. Irving Brick, senior medical consultant for the National Rehabilitation Commission, John J. Corcoran, director of the Commission, and Nicholas Lynch, Jr., assistant director of the Commission.

News Notes from the Bowman Gray School of Medicine of Wake Forest College

Nine faculty members at the Bowman Gray School of Medicine traveled abroad recently to participate in international medical and scientific meetings.

Dr. Walter J. Bo, professor of anatomy, presented a paper on "Sulphomucopolysaccharides of the Uterus," at the International Congress of Anatomists in Wiesbaden, Germany.

Dr. Harold D. Green, professor and chairman of the Department of Physiology, and Dr. John A. Gergen, assistant professor of physiology, presented papers at the 23rd International Congress of Physiological Sciences in Tokyo, Japan. Dr. Green also served as co-chairman of a session on "Peripheral Circulation."

After speaking at the Tokyo meeting, Dr. Gergen traveled to Hakone, Japan, where he participated in a symposium on "Structure and Function of the Limbic System."

Dr. Frederick L. Thurstone, assistant professor and director of the Department of Biochemical Engineering and Dr. George S. Malindzak,

a rapid lift from the hell of depression



Doré Illustration
from
Dante's Inferno

often relieves mental pain in 2-5 days

NORPRAMIN®
(desipramine hydrochloride)

Norpramin is a rapid-acting specific drug for the treatment of depression. Depressive signs and symptoms—sometimes described as "mental pain"—typically begin to improve in 2-5 days. Patients are more hopeful, less empty and less weighed down by their troubles. Norpramin has only slight sedative qualities, nevertheless anxiety *secondary to depression* is frequently relieved as depression is lifted. If anxiety or tension persists it can be controlled by adding a tranquilizer or by reducing dosage. Norpramin is not a MAO inhibitor. Side effects are usually mild.

DOSAGE AND ADMINISTRATION

Optimal results are obtained at a dosage of about 150 mg./day—two 25 mg. tablets t.i.d. After achieving optimal results, a maintenance dose (50-100 mg./day) should be sought.

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IN BRIEF:

Indications: In depression of any kind—neurotic and psychotic depressive reactions; manic-depressive or involutional psychotic reactions.

Contraindications and Precautions: Glaucoma, urethral or ureteral spasm, recent myocardial infarction, severe coronary heart disease and epilepsy. Should not be given within two weeks of treatment with a monoamine oxidase inhibitor. Safety in human pregnancy has not been established.

Adverse Effects: Side effects, usually mild, may include: dry mouth, constipation, dizziness, palpitation, delayed urination, "bad taste," sensory illusion, tinnitus, agitation and stimulation, sweating, drowsiness, headache, orthostatic hypotension, flushing, nausea, cramps, weakness, blurred vision and mydriasis, rash, allergy, transient eosinophilia, granulopenia, altered liver function, ataxia and extrapyramidal signs.

Supplied: Norpramin (desipramine hydrochloride) tablets of 25 mg., in bottles of 50, 500 and 1000.

assistant professor of physiology, presented papers at the sixth International Congress on Medical Electronics and Biologic Engineering in Tokyo, Japan.

Three members of the faculty attended the third International Symposium on Drugs Affecting Lipid Metabolism in Milan, Italy. They were Dr. Camillo Artom, professor emeritus of biochemistry; Dr. Thomas B. Clarkson Jr., professor and director of the Department of Laboratory Animal Medicine; and Dr. Hugh B. Lofland Jr., associate professor of biochemistry.

Dr. Clarkson and Dr. Lofland presented papers at the symposium.

Prior to the Milan meeting, Dr. Artom traveled to Noordwiijk aan Zee, The Netherlands, where he presented a paper at the ninth International Conference on the Biochemistry of Lipids.

Dr. J. Rupert Ravens, assistant professor of pathology participated in the fifth International Congress on Neuropathology in Zurich, Switzerlan. Prior to that meeting he read a paper at a conference at Cajalis Institute, Madrid, Spain. He also participated in a Colloquium of Neuro-Oncology in Bern, Switzerland.

* * *

Four new faculty members were appointed recently at the Bowman Gray School of Medicine. They are Dr. John I. Dalland, research assistant professor of otolaryngology (experimental psychology); Dr. Robert F. Bond, instructor in physiology; Dr. Gerard M. Cerchio, instructor in medicine; and Dr. L. Earl Watts, instructor in medicine.

Dr. Dalland, who holds the M.A. and Ph.D. degrees from Columbia University, is a former associate professor and chairman of the Department of Psychology at Wagner College. For the past three years he has studied as a post-doctoral fellow in the Auditory Research Laboratories of Princeton University. In his new faculty position he will be engaged in otological research and research training.

Dr. Bond has studied for the past year as a cardiovascular trainee at the Bowman Gray School of Medicine. He holds the M.S. and Ph.D. degrees from Temple University School of Medicine.

Dr. Cerchio, a graduate of Georgetown University School of Medicine, recently completed residency in medicine at North Carolina Baptist Hospital. He also has served for the past year as a fellow in endocrinology at the Bowman Gray School of Medicine.

Dr. Watts is a graduate of the Bowman Gray School of Medicine where he has studied for the past year as a fellow in cardiology. A former general practicioner in Faison and in Mocksville, he completed residency training in medicine at North Carolina Baptist Hospital.

* * *

Dr. Robert W. Prichard, professor of pathology, has returned from Leticia, Colombia, where he spent three weeks conducting nutritional studies on squirrel monkeys in the jungles along the Amazon River. The aim of the work was to formulate a diet for the research animals in the Bowman Gray primate colonies that would be nutritionally similar to the foods the monkeys eat in their natural environment.

* * *

Dr. Joseph L. Borowitz, assistant professor of pharmacology, presented a paper on "Calcium in Granules of Adrenal Medulla" at the 1965 Fall Meetings of the American Society for Pharmacology and Experimental Therapeutics in Philadelphia, Pa.

* * *

Dr. Clark E. Vincent, professor of sociology, spoke on "Research on Sexual Behavior" at a meeting of the Society for the Study of Social Problems held recently in Chicago, Ill.

* * *

Dr. William M. McKinney, assistant professor of neurology, has been named permanent chairman of the Forsyth County Heart Association's Stroke Committee. A program has been established for the home care and treatment of strokes in Winston-Salem and Forsyth County.

News Notes from the University of North Carolina School of Medicine

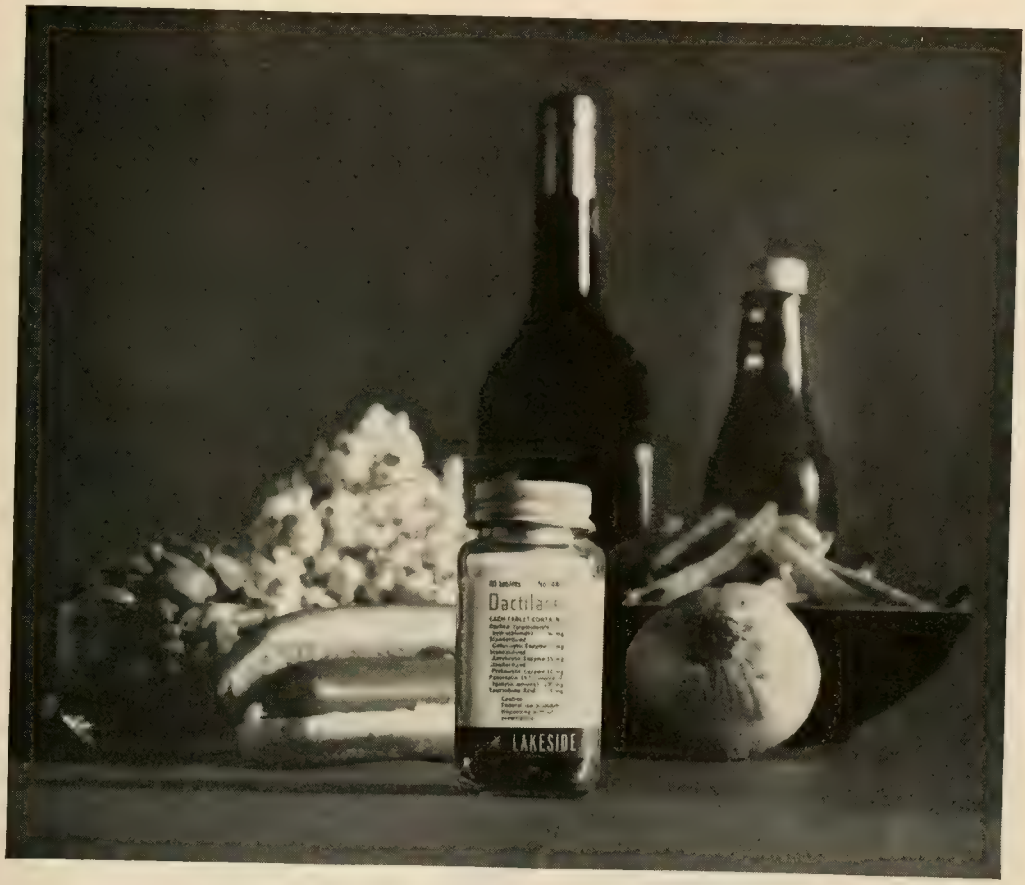
A research and training program in pharmacology and toxicology will be established at UNC with the aid of a $17,000,000 seven-year grant from the National Institute of General Medical Sciences, National Institutes of Health.

Chancellor Paul F. Sharp of the University in Chapel Hill said: "It is a milepost in scientific advancement in medicine in this nation, and a challenge of the first magnitude for this University."

In announcing the grant, the largest single award of its kind, Surgeon General Luther L. Terry of the U. S. Public Health Service said: "Through this research and training program, the University of North Carolina can exert a generally salutary effect on American pharmacology by fostering new outlooks and by substantially increasing the number of talented scientists interested in pharmacological problems."

The Director of the new Pharmacology-Toxicology Center will be Dr. Thomas C. Butler, professor in the Department of Pharmacology, UNC School of Medicine.

Chancellor Paul F. Sharp said the center will be a part of the UNC School of Medicine and will make use of personnel and facilities of the School of Public Health, the scientific departments of the College of Arts and Sciences, the library and the Computation Center here.



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*Need in human nutrition not established. **As acid resistant granules equivalent in activity to 300 mg. Pancreatin N.F.

Side Effects and Contraindications: DACTILASE is almost entirely free of side effects. However, it should be withheld in glaucoma and in jaundice due to complete biliary obstruction.

Administration and Dosage: One tablet with, or immediately following each meal. Tablets should be swallowed whole.

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Dr. Isaac M. Taylor, dean of the University of North Carolina School of Medicine, has been named a member of the National Advisory Research Resources Committee of the Division of Research Facilities and Resources, National Institute of Health.

Dr. Taylor becomes one of the 12 members of the committee. His term is for four years, ending September 30, 1969.

The committee was established about two years ago to assist the Surgeon General on matters relating to programs of the Division of Research Facilities and Resources. The programs include animal resources, general clinical research centers, special research resources and general research support grants.

Dr. Taylor has been a member of the UNC medical faculty since 1952 and became dean of the medical school last September.

* * *

Patients with chronic diabetes and with disorders of the metabolism-regulating thyroid gland will be the center of interest in Chapel Hill in November at the ninth annual endocrinology symposium.

The two-day postgraduate course for physicians will be sponsored by the University of North Carolina School of Medicine beginning on November 18, 1965.

In addition to speakers from the UNC medical faculty, two visiting lecturers will participate. They are Dr. Marvin D. Siperstein of the Southwestern Medical Center in Dallas, Texas, and Dr. Brown M. Dobyns of the Western Reserve University School of Medicine in Cleveland, Ohio.

* * *

Construction in progress or soon to begin on the south side of the University of North Carolina campus here, concentrated in the Health Center area, totals about $30 million.

The expansion will provide more treatment facilities for patients more space to train physicians, dentists, nurses and other health personnel, and more living and eating areas for the mushrooming student population.

In the Health Center alone, projects now authorized and largely funded total over $25 million. Of this amount, about $11 million is in state funds, over $12 million is scheduled to come from federal grants and the remainder is from special funds already on hand.

The physical plant of the Health Center will double in the next five years, followed by a doubling of the overall teaching, research, and patient care programs.

The number of full-time students in the schools of medicine, public health, dentistry, nursing and pharmacy is expected to rise from a level of 1,621 in 25 programs during the past school year to over 2,700 in the 1970-71 school year.

* * *

A Research Career Development Award was made to the University by the Department of Health, Education, and Welfare to finance Dr. George K. Summer and his studies of arthritis and metabolic diseases. Dr. Summer will receive $18,425 each year for the next five years, at the end of which time he may apply for a five year renewal. The title of his project is "Protein—Collagen—Biosynthesis in Mammalian Cell Cultures."

Grant applications are reviewed by consultants composed primarily of non-governmental, nationally recognized leaders in the health field. All awards are made on a competitive basis.

* * *

Dr. Henry T. Clark, Jr., of Chapel Hill has accepted a six-month appointment as a special consultant to the director of the National Institutes of Health, beginning September 1.

Dr. Clark, administrator of the Division of Health Affairs at the University of North Carolina here for 15 years, was granted a one-year leave of absence which began on July 1.

His special assignment with National Institute of Health calls for gathering background information and helping to develop a plan for putting into operation major health legislation now pending in Congress.

His immediate concern will be with the $650 million, administration-backed proposal to establish a series of regional medical complexes for heart disease, cancer and stroke.

Dr. Clarke has had a primary professional interest in the role of universities in comprehensive health care and has spoken frequently at national meetings on the subject.

North Carolina Heart Association

The North Carolina Heart Association Senior Research Investigatorship program at Bowman Gray, UNC, and Duke University medical schools, inaugurated as a five-year program in 1962, has been extended for an additional five years to 1972.

The Investigatorship program, which provides $12,000 a year to a Senior Research Investigator at each of three medical schools in the state, will cost the North Carolina Heart Association $360,000 during the ten years, according to Dr. Daniel T. Young, of Chapel Hill, state Heart Association president.

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In Brief: Patients with hepatic cirrhosis or diarrheal syndromes, or under therapy with digitalis, ACTH, or potassium-losing steroids, should be observed for signs of hypokalemia. With thiazides, electrolyte depletion, diabetes, gout, granulopenia, nausea, pancreatitis, cholestatic jaundice, flushing, mild muscle cramps, constipation, photosensitivity, acute myopia, perimacular edema, paresthesias, neonatal bone marrow depression in infants of mothers who received thiazides during pregnancy, skin rash or purpura with or without thrombocytopenia, may occur. With reserpine, untoward effects may include depression, peptic ulcer and bronchial asthma. Withdraw medication at least 7 days prior to electroshock therapy, 2 weeks prior to elective surgery. Contraindications are complete renal shutdown, rising azotemia or development of hyperkalemia or acidosis in severe renal disease.
Supplied: Metatensin tablets, 2 mg., 4 mg. — bottles of 100 and 1000.

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Recipients of the Investigatorship awards are selected by the deans of the medical schools and approved by the state heart group's board of directors. Senior Research Investigators since 1962 at the three institutions have been Dr. Roscoe R. Robinson, Duke; Dr. Herbert S. Harned, Jr., UNC; and Dr. Joseph Whitley, Bowman Gray.

News Note

Dr. George B. Dysart has joined the Medical Center staff of Olin Mathieson Chemical Corporation at Pigah Forest, according to Dr. A. O. Ryan, Medical Director.

Dr. Dysart replaces Dr. Burness F. Ansell, Jr. who has returned to the Medical College of Virginia for specialized training.

American Medical Association

The dynamics of hospital utilization review programs will be discussed in depth at the Seventh Annual Medical Services Conference entitled "Medical Staff in Action—1965, Utilization Review."

The one-day meeting sponsored by the AMA Council on Medical Service and its Committee on Medical Facilities will be held from 9 a.m. to 4:30 p.m., November 27, in the Bellevue-Stratford Hotel, Philadelphia. The Saturday conference will immediately precede the AMA's 19th Clinical Convention.

For pre-registration write to: American Medical Association, Department of Hospitals and Medical Facilities, 535 North Dearborn, Chicago, Ill. 60610.

American Association of Medical Record Librarians

A glossary of standard hospital and clinical terms, definitions and formulas for use in computing health statistics will be developed by the American Association of Medical Record Librarians.

The United States Public Health Service has granted $99,749 to finance the project. The glossary will greatly facilitate the preparation of statistics in the gathering and classification of uniform information about persons under treatment in health facilities. The project will require close cooperation between a wide range of medical and paramedical groups, as well as state and local licensing agencies.

Industrial Medical Association

A competition for a $250 award for the best manuscript submitted by a medical student, intern, or resident on any subject pertinent to and concerning occupational health has been announced by the Central States Society of Industrial Medicine and Surgery. The contest closes at midnight on December 31, 1965.

AMDOC, Inc.

AMDOC (American Doctor), Inc., the idea of Dr. Paul Williamson of Santa Barbara, Calif., was organized for the purpose of putting physicians in contact with those areas which are in need of physicians' services. It is not associated with any organization, religious or governmental, and exists primarily to serve the American doctor (for which the names stands).

AMDOC asks that the participating physician be a gentleman and in sufficiently good health to withstand the rigors of life in primitive areas and be willing to pay all transportation costs for both himself and his family to and from the field of service. The sponsoring organization is expected to provide room and board for the doctor and his family while in the field.

AMDOC's main accomplishments have been in the areas of Central and South America, the Carribean, Africa, and the Far East. It has scheduled the location of approximately 70 physicians to date.

AMDOC is supported entirely by voluntary contributions. It is a low-budget organization and plans to remain so. Its headquarters are located at 27 East Canon Perido Street, Santa Barbara, California.

U. S. Department of Health, Education, and Welfare

Dr. Roy Hertz has been appointed Scientific Director of the National Institute of Child Health and Human Development, it has been announced by Dr. James A. Shannon, Director of the National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

As Scientific Director of the Institute, Dr. Hertz will be responsible for developing the laboratory and clinical research programs in Bethesda, Maryland, and elsewhere. He will be principal scientific advisor to the Director of the Institute.

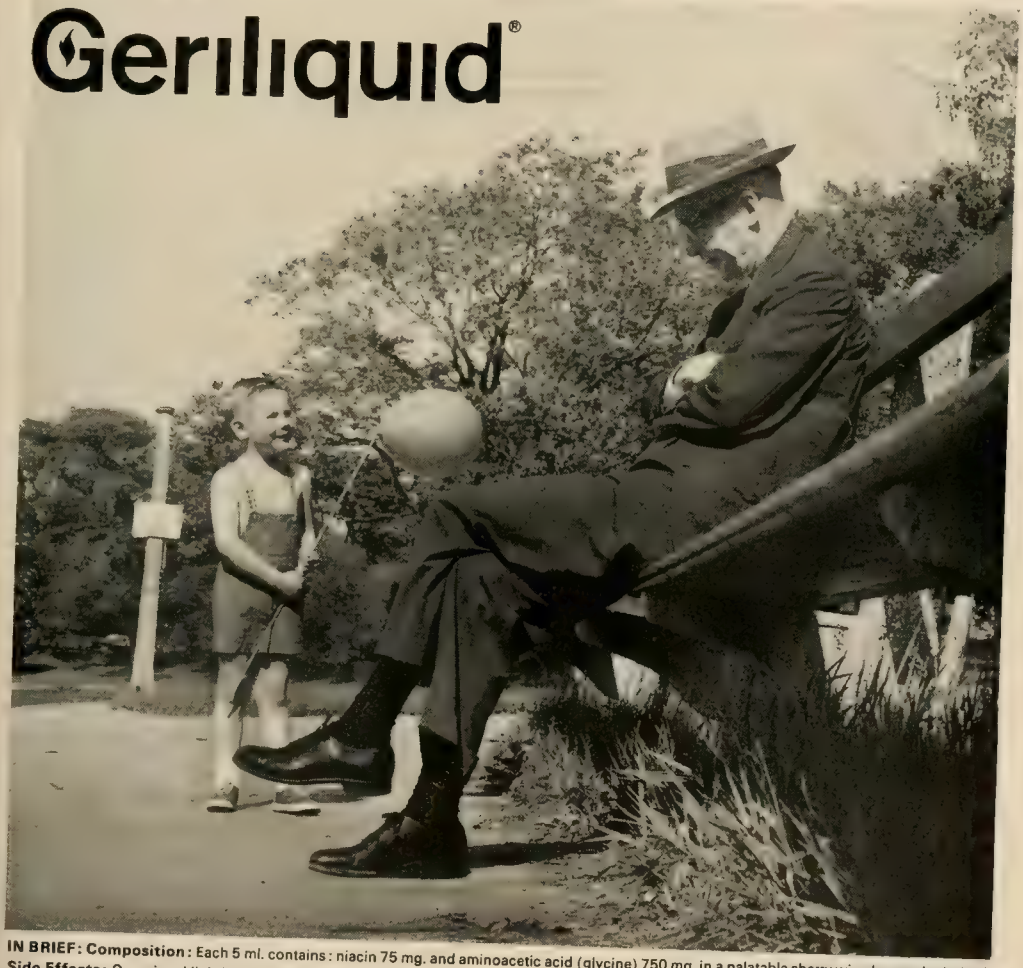
For a copy of "Facts About Heart and Blood Vessel Diseases," write North Carolina Heart Association, 1 Heart Circle, Chapel Hill, N. C. 27514. The 24-page booklet describes 18 of the most common coronary ailments, how they can be controlled, and the prospects for their cure or prevention.

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IN BRIEF: Composition: Each 5 ml. contains: niacin 75 mg. and aminoacetic acid (glycine) 750 mg. in a palatable sherry wine base; alcohol 5%.
Side Effects: Occasional lightheadedness or transient itching which may disappear with continued use. There are no known contraindications; however, caution is advised when there is concomitant administration of a coronary vasodilator.
Administration and Dosage: One or two teaspoonfuls 3 times a day before meals. If flushing is objectionable, dosage may be lowered. However, tolerance to flushing usually develops without loss of efficacy in regard to vasodilation.
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The Month in Washington

Despite the flood of major health measures approved by Congress this year, President Johnson apparently plans to propose more important health legislation next year. Health has been given no. 1 priority on the "great society" program.

To lay the groundwork for new legislation, he has called a White House Conference on Health Nov. 3-4.

The President recently took the occasion of signing two health bills to outline his health goals:

—An increase in the average life expectancy from the present 70 years to 75 years.

—A reduction in infant mortality from the present rate of 25 deaths per 1000 births to 16 per 1000.

Virtual elimination of polio, diphtheria and typhoid fever and an end to tuberculosis, measles and whooping cough.

—A reduction of 20% in deaths from heart disease, cancer and stroke—the so-called "killer diseases" that now account for one-third of all U. S. deaths.

—Elimination of death and disability among children caused by rheumatic fever and rheumatic heart disease.

—Eradication of malaria and cholera from the entire world.

One of these two health bills he signed into law authorizes a three-year, $280 million extension of the Health Research Facilities Act. It also authorizes three additional Assistant Secretaries of HEW, one for Health and Medical Affairs. A special assistant to the secretary had been the top official for Health and Medical Affairs.

The other bill amends the Vaccination Assistance Act and extends it for five years. It authorizes federal expenditures of $8 million a year, broadens the program to include measles and any other disease designated by the Surgeon General of the Public Health Service and makes the immunization program a continuing one, rather than "an intensive community vaccination (program) of limited duration." Expenditure of $45 million during the next five years also is authorized for family health clinics for migratory workers.

Neither the chairman nor the vice chairman of the White House Conference on Health is a physician. However, five of the nine members of the executive committee to plan for the conference are physicians. All were appointed by Johnson.

George Beadle, Ph.D., president of the University of Chicago, will be chairman and Boisfeuillet Jones, former special assistant to the HEW Secretary, vice chairman.

Physicians on the executive committee are Dwight L. Wilbur of San Francisco, a member of the Board of Trustees of AMA; George James, New York health commissioner; Lowell T. Coggeshall, trustee and former dean of the Medical School, University of Chicago; Montague Cobb, professor of anatomy, Howard University Medical School and former president of the National Medical Association, and Michael E. DeBakey, professor of surgery, Baylor University.

The chief executive said the purpose of the conference is to bring together "the best minds and the boldest ideas to deal with the pressing health needs of the nation." He said he hopes the conference will develop "creative programs that will bring better health to every American."

* * *

The Food and Drug Administration issued two proposals designed to eliminate possible causes of illness. One called for a reduction in the amount of vitamin D added to food products and the other for pasteurization of commercial egg products.

Last November Dr. Robert Cooke of Johns Hopkins University expressed concern that the ingestion of excessive amounts of vitamin D was a possible cause of infantile hypercalcemia. FDA Commissioner George P. Larrick then invited the Committee on Nutrition of the American Academy of Pediatrics and a joint Committee of the Council on Foods and Nutrition and the Council on Drugs of the American Medical Association to look into this problem.

Both committees recommended that, while there has been no positive demonstration of a cause and effect relationship of vitamin D

to this disease, there should be restrictions on the marketing of foods containing added vitamin D.

The committee made clear that there is abundant scientific evidence to demonstrate that an excessive intake of vitamin D is of no value and that 400 USP units per day will meet the full requirements of infants, children and nursing mothers.

Larrick concluded that "prudence" called for limiting the amount of the vitamin added to foods.

The proposal would permit the continued addition of vitamin D to such foods as milk products and infant formulas at a level of 400 USP units per quart. Over the counter vitamin D preparations would be limited to a dosage of 400 USP units of vitamin D per day. Vitamin D preparations containing over 400 USP units per day would be sold only on prescription. The proposal would deny authority for the addition of vitamin D to standardized foods such as enriched flour, enriched corn meal, enriched rice, enriched macaroni products, enriched bread, and margarine.

Requiring pasteurization of commercial egg products was aimed at eliminating possible hazards to consumers from Salmonella bacteria in foods that contain eggs. During the past fiscal year, 220,150 pounds of egg products were seized for Salmonella contamination. Such products are used as ingredients in many other foods, including premixed and ready-to-eat foods that the housewife uses. Egg products containing Salmonella have been implicated in cases of food-caused illness in men.

* * *

Summary of Federal Health Care Provisions

BASIC PROGRAM

Hospitalization

Up to 90 days in each spell of illness. The patient pays the first $40 of hospital costs. If he stays more than 660 days, he pays $10 for each additional day up to the 90-day limit. A spell of illness starts with the first day of hospitalization and ends when the patient has spent 60 consecutive days without hospital or nursing care.

The hospitalization covers room and board, prescribed drugs while hospitalized and other services and supplies except private duty nursing and services of physicians other than internes or residents in training. Christian Science sanatoriums and psychiatric hospitals are included. There is a lifetime limit of 190 days in a psychiatric hospital.

Nursing Home Care

Up to 100 days in an extended care facility in each spell of illness after a stay of at least three days in a hospital. There is no charge to the patient for the first 20 days. The patient pays $5 for each day above 20, up to the 100-day limit.

Home Nursing

Up to 100 visits by nurses or technicians in a one-year period following the patient's discharge from a hospital or extended care facility. The services furnished must be in accordance with a program set up and periodically reviewed by a physician.

Diagnostic Services

Tests and related diagnostic services, other than those performed by physicians, that are normally provided by hospitals to out-patients. The patient pays $20 of the charge for each diagnostic study provided by the same hospital in a 20-day period. The patient pays 20 per cent of the charges above $20.

SUPPLEMENTARY PROGRAM

Persons enrolling in this program will pay $3 a month in premiums. The federal government will match this with a payment of $3 a month for each participant. The federal share, about $600 million a year, will come from general tax revenues. The insurance supplements the basic program by covering most other major medical expenses except those for dental services, medicines and drugs.

A participant in the program pays $50 of his annual costs for the services and supplies covered. He also pays 20 per cent of the annual costs above $50 while the program pays 80 per cent.

The coverage includes:

Physicians' services, including surgery, whether performed in a hospital, clinic, office or home.

Up to 100 home nursing visits each year in addition to those allowed under the basic program and without any requirement for prior hospitalization.

Various services and supplies, whether provided in or out of a medical institution, such as X-ray and other diagnostic tests, radiological treatments, surgical dressings, splints, casts, iron lungs and other specified prosthetic devices, artificial arms, legs and eyes and ambulance service.

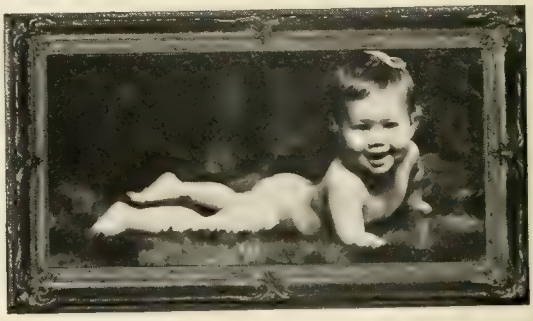
WELFARE AID

The bill authorizes increases of about $400 million in annual federal grants to states for public assistance (relief of the needy) and other welfare programs. It consolidates the Kerr-Mills medical assistance program with five related programs and sets federal standards for the scope



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each cc. contains: 6 mg. phenobarbital (warning: may be habit forming); 4 mg. Piptal® (pipenzolate bromide), and 20% alcohol in a pleasant-tasting solution.

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1—Pomeranze, J., and Gadek, R.J.: Am. Pract. & Digest Treat. *8*:73-77 (Jan.) 1957
2—Asher, L.M.: Am. J. Digestive Diseases *4*:272 (Apr.) 1959

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IN BRIEF: PIPTAL—Each tablet contains 5 mg. pipenzolate bromide, PIPTAL-PHB—Each tablet (or 5 cc. of elixir) contains phenobarbital (warning: may be habit forming) 16.0 mg., Piptal (pipenzolate bromide) 5 mg. The elixir contains alcohol 20%.

Side Effects: Dry mouth, blurring of vision or drowsiness may occur.

Contraindications: Withhold in glaucoma, bladder or g.i. obstruction, cardiac arrhythmias and in sensitivity to anticholinergics or phenobarbital (Piptal-PHB). Caution should be observed in patients with prostatic hypertrophy.

Administration and Dosage: PIPTAL or PIPTAL-PHB Tablets: One tablet three times a day before meals and one or two tablets at bedtime. (PIPTAL-PHB Elixir: One teaspoonful three or four times daily for adults and children over six years of age.)

Supplied: PIPTAL (pipenzolate bromide) 5.0 mg. Tablets—bottles of 100. PIPTAL-PHB Tablets—bottles of 100. PIPTAL-PHB Elixir—bottles of 8 fluid ounces.

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of benefits and eligibility of beneficiaries.

A new program of health care for children in impoverished families is established, with $185 million in grants authorized for the first five years. Grants for maternal and child health services and aid to crippled children are raised in four steps from the present level of $80 million to $120 million in 1970.

By revising the general formula for public assistance grants, the bill raises annual federal authorizations by $150 million.

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N. C. Pharmacist interested in contacting one or more physicians in reference to opening an independently owned and operated drug store. Any location in state considered, but prefer a small town. Contact CFP, P. O. Box 790, Raleigh, N. C.

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Book Review

Personal Understanding of Marriage. By Jean Rutherford, B.A., and Robert Rutherford, M.D. Price, $1.50. Chicago, Budlong Press, 1964.

The expressed aim of this booklet is to provide a "know-how" guide for the self-correction of marital problems. Any person reading it will be provided with a fund of excellent information on many subjects related to sex and marriage, all written about with insight and humor.

The authors are a unique team. Mrs. Rutherford is a family counselor and her husband, who is the editor of the Western Journal of Surgery, Obstetrics and Gynecology, has pioneered in finding ways in which the non-psychiatric physician can use his training for the prevention and salvage of marital difficulties.

This booklet could be very valuable if made available in a waiting room. Just reading it could help some people solve their own simpler family problems. Certainly its presence can encourage a patient to discuss marital stress with her physician or to follow the advice given: "As you read this book, if your problems are not answered, you may need to consult a marriage counselor."

1965 Christmas Cards Now Available From HOPE

Project HOPE began shipping its 1965 Christmas cards on October 1.

The cards, which include the coats of-arms of countries visited by the S. S. HOPE, are embossed in rich hues of gold and red.

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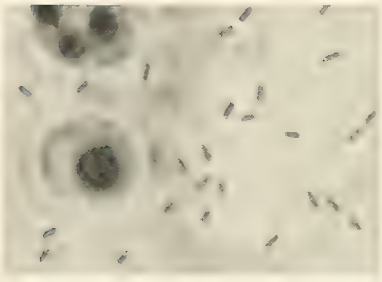
The Carpal Tunnel Syndrome
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"Misery in the Hand"—The Carpal Tunnel Syndrome

ALLAN W. DOWNIE, M.B., M.R.C.P.

ABERDEEN, SCOTLAND

Despite the increasing complexity of modern medicine, there is still little that offers more satisfaction to the practitioner than the ability to diagnose and treat effectively persistent or recurring discomfort and pain.

One such condition, aptly and vividly described by some sufferers as "misery in the hand," in all probability is seen several times a year by most general practicitioners. Until the last two decades the cause of this syndrome was obscure, and it was regarded often as an atypical manifestation of some other disorder, such as "scalenus anticus syndrome," "neurovascular compression at the thoracic inlet," or "cervical arthritis"; or it was given a descriptive title such as "acroparesthesiae." Although all practitioners are now aware of this entity, a full realization of the symptomatology has been slow to develop and spread, and even now only a small proportion of patients referred to hospitals come with a correct diagnosis of median nerve compression in the carpal tunnel.

It is not the intention of this paper to assert that all pain, tingling, numbness, or weakness of the hand is due to this condition, but it is felt that a description of the symptoms and findings in a group of 80 affected patients seen at North Carolina Memorial Hospital over the last 13 years, and a review of the diagnostic and therapeutic measures employed might aid others to recognize and treat this distressing, fascinating, and eminently remediable disorder.

Case Material

Seventy out of 80 of these patients were seen personally either as outpatients or at some stage of their inpatient stay and had nerve conduction studies carried out. The majority of these were also seen by many other physicians in this hospital. Ten of the patients did not have nerve conduction studies, as they were seen at a time when the studies were not available. Most of these ten were not seen personally, the history and findings being obtained from a review of the charts.

Incidence

Increasing interest in this condition and growing confidence in making the diagnosis, especially with the help of nerve conduction studies, have undoubtedly contributed to the marked increase in the recorded incidence of this disorder. Between 1952 and 1957 only 5 cases are recorded in the inpatient hospital records. Since that time a diagnostic index for both outpatients seen in the neurology clinics as well as for all inpatients has been available. The number of cases diagnosed as carpal tunnel syndrome has increased steadily year by year, reaching a total of 23 in 1964. The age distribution and sex of these patients are shown in Table 1. Sixty-two were white and 14 Negro.

Table 1
Distribution of Cases by Age and Sex (80 Patients)

Age (years)	No. Males	No. Females
11-20	1	0
21-30	2	4
31-40	8	11
41-50	10	17
51-60	4	8
61-70	0	12
Over 70	3	0
TOTAL	28	52

Age range 19-83 years

From the Division of Neurology, Department of Medicine, University of North Carolina, Chapel Hill.

Table 2
Symptoms Noted in 80 Patients

Symptom	No. Patients	Per Cent	Distribution of Symptom	No. Patients	Per Cent
Tingling	58	72	Whole hand	36	45
			Whole median area	24	30
Numbness	54	67	Part of median area	20	25
			Hand	51	64
			Wrist or forearm	33	41
Pain	56	70	Shoulder	15	19
			Pectoral area	3	4
Burning or coldness	9	11			
Nocturnal aggravation	43	54			
Swelling	26	32			
Subjective weakness	20	25			

Symptomatology

The relative frequency of the commoner symptoms and signs in these 80 patients is summarized in Tables 2 and 3. A typical story might be as follows: A middle-aged housewife first notices some tingling in the fingers which initially is intermittent and often precipitated by unusual exertion involving gripping, sewing, ironing, knitting, or holding the steering wheel of a car on a long trip. Later this tingling becomes a more disagreeable sensation, at times described as an aching, burning, or bursting feeling, and often likened to the feeling experienced when the fingers are "waking up" after having been exposed to severe cold. At this point the patient will sometime describe it as "a misery in my hand."

This painful sensation often occurs when the patient is in bed at night and will awaken her from sleep, sometimes several times each night. Relief is often sought by elevating the arm or hanging it over the edge of the bed, or rubbing the hand "to get the circulation back"; and after about 20 minutes these measures are often successful. Such nocturnal symptoms with their consequent insomnia may go on for years and lead to a diagnosis of depressive reaction.

Many patients describe subjective numbness in the fingers which often cannot be localized to a strict or a complete median nerve distribution, and may indeed affect only two fingers such as the ring and middle fingers. Extension of pain but not of sensory disturbance upwards along the flexor aspect of the forearm to the elbow and occasionally to the shoulder or pectoral region is by no means rare and may lead to a mistaken diagnosis of cervical root or plexus involvement. This spread usually occurs when the pain is most severe and is always centrifugal. In describing it, patients are often poor historians and initially may say that both the pain and sensory disturbance spread up the arm. Closer questioning, however, usually discloses that the sensory disturbance is indeed confined to the hand while only the pain and aching spread proximally. Some difficulty in handling small objects and unscrewing jars may be experienced as a result either of sensory loss in the thumb and index finger or of weakness of the median innervated muscles, particularly the abductor pollicis brevis, or of a combination of both. Some patients complain of a sense of swelling of the fingers and may even state that their rings become tight. Increased mottling, pinkness, or blueness of the hand are other occasional symptoms.

Signs

Some patients with intermittent episodes may show no clear evidence of weakness, wasting, or sensory loss for several years even though much disturbed by nocturnal pain. Careful examination may show slight weakness in the abductor pollicis brevis, which is not, however the easiest muscle to assess. Disturbed perception of textures, two-point discrimination, and pinprick appreciation affects the palmar surfaces of all

Table 3
Signs Noted in 80 Patients

Sign	No. Patients	Per Cent
Weakness of abductor pollicis brevis	37	46
Wasting of abductor pollicis brevis	20	25
Fasciculation in abductor pollicis brevis	2	2.5
Diminished pinprick-appreciation	45	56
Diminished touch-appreciation	35	44
Diminished two-point-discrimination	9	11
Pain or dysesthesiae on percussion over nerve	16	20
Associated findings		
"Trigger finger"	5	6
Ganglia around tendons of wrist or hand	4	5

but the little finger and half of the ring finger. Tenderness on pressure over, or percussion on the median nerve just above the wrist is present in a proportion of patients. While forced passive flexion of the wrist may also provoke pain or tingling, none of these signs were found very often but were not searched for routinely in all cases.

A few patients may present more motor than sensory involvement, and may indeed show complete atrophy of the abductor brevis and opponens pollicis. Of these patients some may recall a spell of pain or tingling experienced some years earlier, but this history cannot always be elicited. One such patient in this series experienced only motor loss, and it may be questioned whether her disorder was indeed due to a lesion of the motor branch of the median nerve beyond the carpal tunnel rather than to a partial lesion within the tunnel, especially as her work in a textile mill involved hitting a roller repetitively with the base of her hand. Atrophy of the pulp of the distal phalanges of the index and middle fingers was seen in two patients—presumably due to a trophic disturbance.

Etiology

The etiology must be considered first in relation to the anatomy of the carpal tunnel. This narrow canal is bounded on all sides by rigid structures, posteriorly by the bones of the carpus and anteriorly by the very thick transverse carpal ligament. Apart from the median nerve, the canal contains the tendons of the long flexor muscles and their tendon sheaths. The restrictive nature of the tunnel can be readily appreciated at operation, and it can be seen how any increase in volume of the structures passing through it might result in compression of the median nerve directly or by disturbance of its blood supply. That indeed both mechanisms may operate has been suggested by the work of Fullerton[1] in 1963.

Various forms of synovial thickening may in fact be the anatomic substrate for the majority of such cases where local deformity of the carpus from injury can be excluded. One might, therefore, expect to see the condition in a variety of rheumatic disorders such as rheumatoid arthritis[2], gout, and acute tenosynovitis, and also in conditions causing soft-tissue swelling, such as acromegaly[3] and myxedema[4]. Five patients in this series had, or gave a history of, stenosing tendinitis of one or other fingers. Four had small ganglia associated with the tendons around the wrist or hand. Only one of these involved the median nerve directly, but the others are of interest in indicating a more diffuse disorder of tendon sheaths than would be suggested by the presence of a simple "carpal tunnel syndrome."

Acute and chronic bacterial infections involving the carpal tunnel have also been reported as a cause of median nerve compression, although no examples were found in the present study. Occurrence in pregnancy, usually in the last trimester, is also recognized[7] and in such instances can often be related to increased retention of fluid. The development of symptoms in the puerperium, however, may be partly due to increased use of the hands for such activities as wringing out diapers. A relationship to pregnancy or the puerperium was seen in six patients in this series. In one the symptoms recurred in two pregnancies and later, in the non-pregnant state, in association with increased work in the garden. Some patients associated an increase in symptoms

Table 4
Associated Disorders of Possible Etiologic Significance (80 Patients)

	Male	Female	Total
Rheumatoid arthritis	3	6	9
Gout	3	0	3
Acromegaly	1	0	1
Hypothyroidism	0	5	5
Diabetes mellitus	2	4	6
Sarcoid	0	1	1
Pregnancy or puerperium	—	6	6
Epiphyseal dysplasia	1	0	1
Old fracture of wrist	2	0	2
Multiple myeloma	0	1	1
	12	23	35(44%)

with a gain in weight apart from pregnancy, and seven women in this group were noted to be obviously obese.

The relationship of this disorder to diabetes is less certain but has been apparent in this series and also in that of Blodgett[8]. Of the 6 diabetic patients seen here, one was also pregnant. The others, all of whom had typical carpal tunnel symptoms, showed no evidence clinically or electrically of neuropathy in the upper limbs apart from the distal segment of the median nerve. Many other diabetics have shown electrical evidence of impaired conduction in the median and ulnar nerves but did not manifest the typical symptoms.

Association with multiple myeloma[8] has been reported on several occasions, and one case is represented in this series. One patient with sarcoidosis worked on a farm and carried feed to 3,000 chickens daily, so that the association here may have been coincidental. Local deformities of the wrist were probably a factor in three patients, of whom two had old fractures and one had deformity associated with epiphyseal dysplasia. Routine x-rays of the wrist, however, were not obtained on all patients in this series, and more abnormalities might have been found if this practice had been followed. Table 4 summarizes the disorders noted in these patients which may be related to the median nerve lesion.

That precipitation or aggravation of symptoms is related to the use of the hands

Table 5
Distribution of Symptoms (80 Patients)

Laterality of Involvement		Total No. Cases
Unilateral		
Right	24	34 (42%)
Left	10	
Bilateral		
Right > Left	27	46 (57%)
Left > Right	8	
Right = Left	11	

is borne out in many ways. Table 5 shows that the right hand is affected more often or to a greater degree than the left. Aggravation of symptoms with use of the hand was specifically noted in 39 patients in this series. This may happen at the time or, more commonly, during the night after a day of excessive use. The reason for the nocturnal aggravation is not clear, but it may represent postischemic paresthesiae associated with the reduction of edema while the patient is resting in bed.

Several patients ascribed the onset of symptoms to an episode of unusual activity such as moving house or working in the yard, and in many cases occupational factors were probably significant. Patients reported problems with tying tobacco or operating sewing machines or adding machines. Four of the patients were mill workers. Several engaged in domestic work outside their homes, including much ironing. The youngest patient in the series, a 19-year-old youth, had been forced for financial reasons to halt a cross-country trip and take a job on a farm involving more manual work than was customary for him. Within one month he developed severe bilateral symptoms and diagnostic signs on electrical testing.

A connection between use of the hands and emotional problems was also noted. Several patients seemed to be under pressure to be working at all possible times, saying that they could not bear to sit idle. One, in addition to caring for a disabled husband, held down two jobs, one of which involved cooking in a restaurant and the other running a laundromat where she added a serv-

ice of folding linen for her customers. In some patients compulsive activity seemed to be a defense mechanism hiding an underlying depressive state. Some patients, of course, presented rather chronic fatigue and mild depression because of insomnia secondary to the physical disorder.

Although psychiatric factors were not evaluated extensively in this series, 15 patients were judged to have considerable emotional difficulties (Table 6). This fact

Table 6
Associated Psychiatric Factors

	No. Patients
Extreme tension revealed by history and on interview	6
Compulsive activity	4
Depression	2
Hysterical personality	2
History of schizophrenic episode	1
TOTAL	15

should be stressed, as it is very easy to regard obviously neurotic or depressed patients who complain of tingling in the hands and sleeplessness as suffering only from a neurosis, particularly if no objective neurologic findings are demonstrable.

Diagnosis

While the history often gives the best clue to diagnosis, the most reliable findings on examination are weakness of abduction of the thumb (in a plane at right angles to the palm), followed by hypalgesia or hypesthesia in median nerve distribution. Sensation over the base of the palm, however, is normal, as the palmar branch of the median nerve arises above the carpal tunnel. Seventeen patients in this series had no sensory or motor abnormalities detectable clinically. Induction of increased tingling or sensory loss in the median nerve distribution by such means as tapping on the nerve at the wrist (Tinel's sign), forceful passive flexion of the wrist (Phalen's sign) or ischemia following application of a tourniquet (Gilliatt and Wilson)[9] has increased confidence in the clinical diagnosis. These tests did not prove reliable in this series and were abandoned when nerve conduction tests were found to be more useful. The conduction rate in both sensory and motor fibers of the distal portion of the median nerve can be estimated and compared with the conduction rate in the median nerve above the wrist or in the ulnar nerves.

Conduction tests are now available at North Carolina teaching centers and are of greatest help in evaluating patients who are unreliable historians or in whom no abnormal physical signs are present. An analysis of the results of these tests will be published elsewhere, but the techniques used and results found earlier have already been described[10]. Three patients not included in this series showed normal results of nerve conduction tests, yet have symptoms which are somewhat suggestive of carpal tunnel syndrome. It is certainly possible that mild or early cases may not show abnormality, but it is equally possible that these three patients are suffering from some other disorder.

Differential Diagnosis

Because of the aggravation of symptoms related to certain positions of the arm or to carrying heavy objects, a diagnosis of thoracic inlet syndrome is often considered. Until the pathophysiology of carpal tunnel syndrome is better understood, a possible relationship between these two syndromes should not be completely rejected. An ischemic condition of the median nerve at the wrist might possibly be aggravated by factors interfering with the subclavian artery or the venous return. However, since nerve conduction studies have been able to define objectively the abnormality in the distal segment of the median nerve, fewer and fewer cases are now seen which can confidently be attributed to a disorder at the thoracic inlet. In these few patients, symptoms usually consist of coolness of the hand, with a sense of aching along the inner border of the forearm. Atrophy of the intrinsic muscles of the hand, usually those supplied by the ulnar nerve, is also seen occasionally.

Cervical root involvement as a result of degenerative disease should seldom cause difficulty in diagnosis. The pain in this condition, if present, always follows a centripetal pattern, and the paresthesiae and sen-

sory loss are usually referred more to the dorsum of the hand than to the palmar aspect. Objective sensory findings follow a radicular pattern and extend above the wrist in most instances. Appropriate reflex changes are also present. Roentgenographic evidence of degenerative changes in the cervical spine or of a cervical rib should not be taken to exclude the diagnosis of carpal tunnel syndrome. Patients suffering from subacute combined degeneration or from an early polyneuropathy may complain of tingling and numbness in the hands, but questioning and examination will disclose involvement of the lower limbs as well. Multiple sclerosis may also present with numbness and parethesiae in one hand. Normal nerve conduction studies would be expected in this condition, however, and may be of help in a negative way.

Treatment

If any underlying disorder such as gout, rheumatoid arthritis, or hypothyroidism is present, treatment of this primary condition may give relief and should always be considered first. If the cause of the syndrome is uncertain or if treatment of the primary disease is not likely to improve the median nerve compression, then some form of local therapy must be considered. As use of the limb tends to aggravate the disorder, rest is the first principle of treatment and is best achieved by supplying a light anterior splint to immobilize the wrist. This splint often gives rapid relief in early or mild cases and should be worn during the day for several weeks. Most authorities however, find that relapse is very common when the hand is restored to normal use. Diuretics may be of some help, particularly when the syndrome occurs during pregnancy, and some authors have advocated the use of these drugs in all cases[11]. The local injection of hydrocortisone has also been recommended[12] but has not been used routinely here.

The treatment employed in the present series of cases comprised either rest, usually in conjunction with splinting, or surgical decompression of the carpal tunnel. One patient with symptoms related to acromegaly was relieved following irradiation of the pituitary. Surgical treatment was advocated if splinting and rest failed or if the symptoms were already severe and of long duration and were accompained by marked sensory loss or wasting of the abductor pollicis brevis. Provided nerve conduction abnormalities were clear-cut and correlated well with the history, the absence of neurologic findings was not regarded as a bar to operation. Indeed relief of symptoms was most dramatic in those patients in whom nocturnal pain and "misery" were most prominent but who sometimes showed few or no abnormal signs.

No valid comparison between the surgically and medically treated patients is possible. Operation was carried out on 35 nerves in 30 patients. Seventeen patients were symptom-free on follow-up, and another nine were much improved. Two others improved slightly, and only two could be said to have a poor result. Both of the latter had some change in the pattern of complaints after operation, suggesting a considerable emotional overlay. One other patient required a second operation to achieve relief, at which time it was found that the distal fibers of the carpal ligament had not been sectioned earlier. This difficulty usually arises when, for cosmetic reasons, a small transverse incision is made at the wrist rather than the longitudinal incision which allows a much better exposure.

The relief of pain, particularly of nocturnal pain, is dramatic after operation. All intermittent symptoms are relieved usually within the first 24 hours. Sensory loss and motor weakness naturally take longer and, if very severe, may be to some degree permanent. Of the 41 patients treated conservatively in whom reasonable follow-up was available, 18 still complained of intermittent symptoms when last seen. Spontaneous recovery, however, occasionally occurred even after symptoms had been present for a considerable period.

Conclusion

This seemingly extremely localized and mechanical disorder, when explored, offers an unexpected wealth of associations in the fields of general medicine, endocrinology,

orthopedics, and psychiatry. The alert physician should remember these relationships in both directions. For instance, the patient with diabetes whose hand becomes numb may not have diabetic neuropathy, and similarly the patient who presents with paresthesiae in the hands may have hypothyroidism or acromegaly.

Summary

The symptomatology and clinical findings in 80 patients suffering from compression of the median nerve in the carpal tunnel are reviewed, and the etiologic relationship with various systemic diseases is discussed. This disorder should be considered in the majority of patients who present with nocturnal pain or acroparesthesia. Where clinical examination cannot confirm the diagnosis with absolute certainty, nerve conduction studies now available at teaching centers will be of greatest assistance. Although early and mild cases usually respond to conservative measures, surgery offers a most reliable, rapid, and safe cure.

Acknowledgements

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Orbital Fractures

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Because of the variety of symptoms and conditions attending orbital fractures, it seems fitting to discuss them at a meeting of both ophthalmologists and maxillofacial surgeons. In our examining rooms we regularly see many victims presenting any one or many of the associated findings. Since these fractures occur singly and in conjunction with other injuries, the diagnosis and pathologic picture should be borne clearly in mind.

Anatomy

Seven bones enter into the formation of the orbit. Three of them—the supraorbital arch of the frontal bone, the zygomatic bone, and the maxilla—form its anatomic rim, which is directed anteriorly. The floor of the orbit is composed almost entirely of the maxilla, corresponding with the roof of the maxillary sinus. The lacrimal bone, the lamina papyracea of the ethmoidal bone, the orbital process of the palatine bone, and the wings of the sphenoid enter into the formation of the medial wall, roof, and lateral wall respectively. By definition, therefore, orbital fractures involve these bones as they relate to the orbit. In actual practice, the supraorbital arch, the zygomatic arch or malar bone, and the orbital surface of the maxilla are the most frequently fractured. To a lesser extent, fractures of the lamina papyracea or medial wall of the orbit are noted.

The Orbital Roof and Rim

Deformities of the orbital roof usually follow fractures which involve the frontal bone and frontal sinus. Excluding the possibility of a concomitant serious head injury, one may find the margin of the orbit splintered and pieces of bone driven into the orbital cavity. Lagrange[1], in 1917, showed that the thin orbital roof gives way, particularly in the posterior part, in the region of the superior orbital fissure and optic foramen. A fracture of this type extending from a blow over the frontal region, therefore, tends to injure the optic nerve and the nerves extending to the extraocular muscles, which enter the orbit by way of the superior orbital fissure. The most common finding is only a depression of the supraorbital ridge in the vicinity of the supraorbital nerve. There is a palpable defect and some anesthesia of the skin supplied by this nerve.

Treatment consists of open reduction to remold the frontal sinus. This is accomplished through an incision between the dorsum of the nose and the medial canthus of the eye. The lacrimal sac is temporarily elevated and retracted from the lacrimal groove. Posterior to the area of the lacrimal groove the lamina papyracea of the ethmoid is inspected. Some manipulation at this point relieves any depression into the orbit. However, it is usually best to cut through the ethmoidal sinus to the frontal sinus, entering the latter by removing part of the floor. Any fracture of the anterior wall is pried forward with a blunt probe. By this time the orbital roof is sufficiently exposed to permit further manipulation and reduction. Only occasionally when fragments are extremely loose is interosseus wiring necessary.

Fractures of the Medial Orbital Wall

Fractures of the medial orbital wall are usually the result of backward displacement of fragments of the nasal bone and the frontal process of the maxilla. These bones may be comminuted and protrude into the

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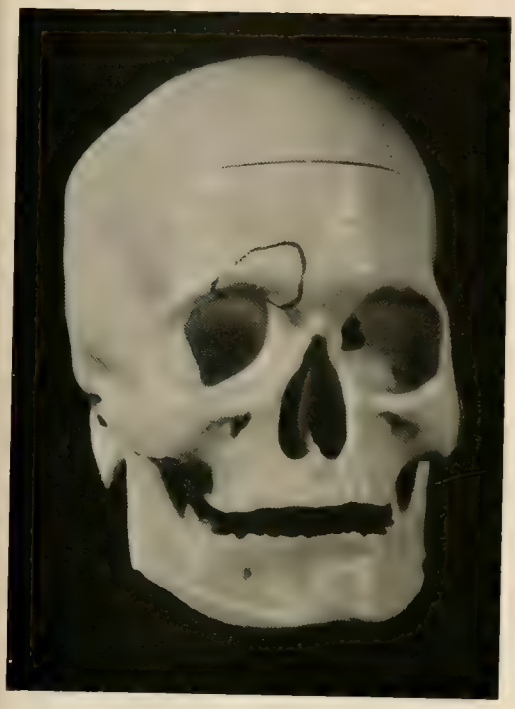


Fig. 1. Plastic anatomic model. Note outline of supraorbital fracture.



Fig. 2. Plastic model showing fractures of the nasal and ethmoid bones.

orbital region, injuring the lacrimal sac, ethmoidal vessels, and medial canthal ligament. The ruptured ethmoidal vessels may cause a severe hematoma of the orbit, revealed by marked ecchymosis, proptosis, and immobility of the eyeball. Interference of lacrimal function is manifested by inability to evacuate tears. Infection and suppuration may be the result.

Most characteristic of this fracture, however, is the widening of the distance between the two medial canthi. The medial portion of the orbit is filled with bone fragments pushing the globe laterally. The medial canthal ligament is detached and the palpebral fissure is narrowed and pulled laterally owing to a release of tension upon the orbicularis oculi muscle. This same relaxation of the lid margins causes the lacrimal puncta to lose intimate contact with the eyeball. The mechanism of collection and evacuation of tears is thus impaired and epiphora may result.

It is obvious that the treatment of deformities of the medial wall of the orbit often requires correction of the nasal bones as well. After such reduction as is indicated to restore nasal alignment, the ethmoidal fractures are usually not a problem. But due to the proximity of the sinuses and communication with the nasal cavity, infection as well as orbital emphysema can occur when the patient blows his nose. If there is palpable displacement of symptoms resulting from malposition of the orbital adnexa, a curved incision is made over the frontal process of the maxilla and the periosteum is raised from the bone. Displaced bone fragments protruding into the orbital cavity are manipulated into position or, if old and fibrosed, resected. A primary procedure on the lacrimal sac may be performed at this time or deferred. If realignment of the fragmented bone does not adequately support the palpebral ligament, a new site for reinsertion is selected, usually at or posterior to the posterior crest of the lacrimal groove. The restoration of the nasolacrimal system large-

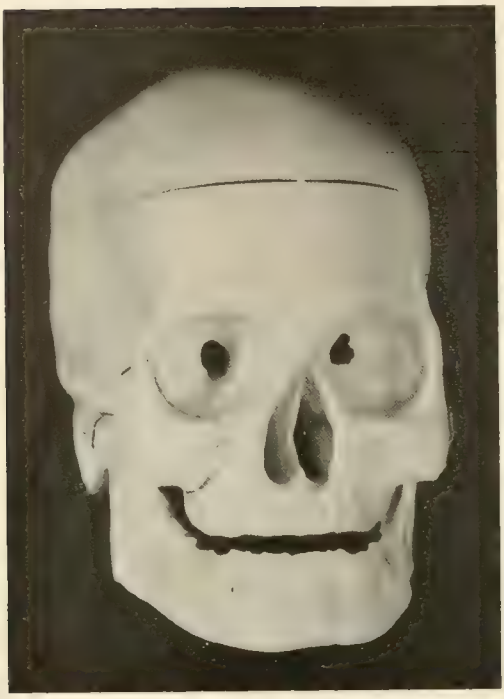


Fig. 3. Plastic model showing typical fracture sites of lateral orbital wall and inferior rim.

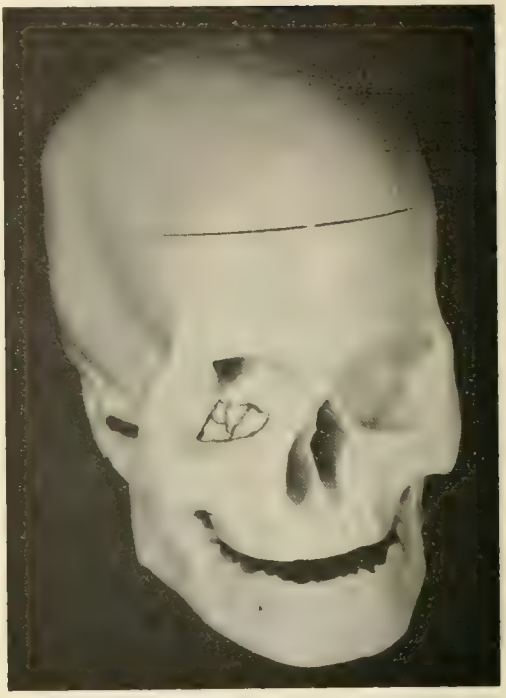


Fig. 4. Plastic model showing area of orbital blow-out fractures.

ly depends on the nature of the individual case.

Fractures of the Lateral Orbital Wall and Inferior Rim

Fractures of the lateral orbital wall are usually the result of direct trauma to the malar eminence, involving also the adjacent inferior rim. Since the lateral portion of the orbital floor is formed by the zygoma, a deformity may be expected here also. Separation usually occurs at the zygomaticofrontal suture line and the zygomaticomaxillary suture line[2].

Clinically, then, a gap is noted in the lateral wall of the orbit and along the inferior orbital rim. The lateral canthus and the attachment of the lateral palpebral ligament are displaced downward. Signs and symptoms include depression of the malar eminence, tenderness at fracture sites, anesthesia over the anterior face in the distribution of the infraorbital nerve, limitation of mandibular excursion due to impingement of the zygomatic fracture on the coronoid process of the mandible.

Treatment is directed toward restoration of the orbital contour. This is usually done by first elevating the malar eminence and any associated depression of the zygomatic arch. Many techniques may be used, but it seems generally advisable to enter the maxillary antrum via a Caldwell-Luc incision, particularly when the orbital floor is involved. This technique provides an opportunity to inspect the orbital floor and evaluate any herniation of the inferior rectus or inferior oblique muscles into the antrum. In addition, it allows the insertion of a prosthetic device, usually an iodoform pack, to support the realignment until healing has occurred. One may also elect to expose the fracture lines at the inferior and lateral orbital rims in order to stabilize further the zygoma with a stainless steel wire. This measure, however, is seldom necessary except where the eminence is extremly "free floating." The pack may be removed

through the canine fossa incision in two to four weeks.

Fractures of the Orbital Floor

Fractures of the orbital floor are a separate clinical entity both in diagnosis and etiology. They result when the globe, on being struck itself, acts as a missile striking the inferior floor. The resultant blow-out fracture is primarily a "blow-down" fracture, occurring as the orbital floor gives way under the impact of the globe. The mechanism of production becomes clear when it is understood that the orbital floor slopes upward from the rim to the optic foramen and is composed of a thin sheet of bone in contrast to the roof, which is much thicker and more resistant to fractures. Thus a blow to the globe will most likely cause decompression downward if sufficient force is encountered.

By definition, then, the resultant injury would include decompression of bony fragments into the maxillary antrum, which may or may not be accompanied by orbital fat and herniation of the inferior rectus and inferior oblique muscles. Symptoms would include diplopia due to limitation of motion on upward gaze, inferior displacement of the globe itself, or both. Care must be taken to evaluate the condition properly, since a periorbital hematoma may support the eye and mask the diplopia, and since routine roentgenograms will be interpreted as negative for fractures if the rim itself appears intact. The forced duction test will demonstrate the interference with the rectus and oblique ocular muscles and posteroanterior (PA) planigrams at 0.5-cm intervals should outline the extent of the fracture. Lateral projections should also be made, but the PA views have the advantage of allowing a comparison with the uninjured side. This view is of more value than any other type in the x-ray diagnosis of blow-out fractures[4].

Again the treatment is directed toward restoring contour and immobilizing the fragments for a sufficient length of time to allow healing to take place. Open reduction is indicated if any herniation has occurred or if the bony plate is depressed by 3 or more millimeters[5]. The approach is similar to that of a malar fracture if detection is made within the first ten days. The Caldwell-Luc incision is made and the maxillary antrum opened to allow inspection of the orbital floor from below. If the fracture is older than two weeks[5], or if the bony fragments do not lend themselves to realignment or are absent, a bone graft may be introduced subperiosteally, through an incision over the inferior orbital rim. The latter would also be the approach for an "upward" fracture of the floor, which is extremely rare.



Fig. 5. Drawing to show how the globe acts as a missile, receiving force from a ball and producing a fracture of the orbital floor.

Summary

Most orbital fractures fall into a classical pattern, but an accurate diagnosis is dependent upon knowledge of the anatomy and familiarity with this type of injury. Management of the individual case varies greatly with the experience and preference of the surgeon. Therefore treatment is directed toward the basic objectives of maintaining vision and ocular motility without diplopia, and restoring facial contour and symmetry.

The approach is, first, to realign the involved sinus, taking care to prevent infection, and then to accomplish fixation by antral packing. Skin incisions are avoided.

Implants are recommended only as a secondary procedure to correct enophthalmos or improve facial contour.

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Spontanous Resolution of Post-traumatic Carotid-Cavernous Sinus Fistula

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Recently attention has been drawn to the clinical manifestations of internal carotid-cavernous sinus fistula[1,2]. The fistula results from trauma to the head in about 75% of the cases and occurs spontaneously in 25%. It has been estimated that one traumatic carotid-cavernous sinus fistula occurs in every 400 head injuries[3]. While the increasing number of traffic accidents primarily accounts for the difference in the incidence, arteriosclerosis, hypertension, and aneurysms of the internal carotid sinus within the cavernous sinus have been suggested as predisposing factors in spontaneous rupture of the artery. Odom[1] has presented an excellent review of the problem, with emphasis on the neurosurgical challenge it presents. Since numerous procedures have been advocated, and all involve some disadvantages while none guarantees a cure, the occurrence of an additional case of spontaneous resolution of a post-traumatic fistula deserves mention.

Case Report

A 57-year-old white woman was seen at Memorial Mission Hospital after being in a two-car head-on collision on March 8, 1964. She had sustained a head injury with facial lacerations and left orbital trauma.

Her past history revealed that she had been in excellent health. She denied having any visual difficulty, hypertension, or symptoms of cerebral vascular insufficiency.

Physical examination showed a semi-responsive patient whose blood pressure was 110/60 mm Hg, respiration 16/minute, and pulse 72 (regular). Ophthalomologic examination showed her vision to be unchanged by the accident. A small superficial laceration of the nasal aspect of the upper lid with subcutaneous hemorrhages in both lids and extension into the left frontoparietal area was present. Palpation revealed crepitus and irregularity of the inferior orbital rim temporally. Auscultation of the head and neck was negative for bruit. Subconjunctival and retrobulbar hemorrhage with slight proptosis was evident. The anterior segments were normal. The pupils measured 4 mm and reacted promptly and briskly to the light and near reflexes. Extraocular muscle analysis showed lateral rectus paralysis on the right. The posterior segments (by undilated-direct ophthalmoscopy) were normal.

Roentgenographic studies of the skull revealed a comminuted nondepressed fracture of the left frontal and parietal regions, with the posterior component extending into the floor of the middle fossa. A nonrotated, slightly depressed fracture of the left zygoma, with fractures of the left inferior maxilla and zygomatic arch and separation of the frontozygomatic suture, was more accurately demonstrated by Walters' view and planigrams. In addition, a Colles-type fracture of the left wrist was present.

After the patient's lacerations had been

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closed under local anesthesia, she was admitted for observation. Routine laboratory studies were within normal limits. During the following week she gradually improved and became fully conscious. On the morning of March 15, 1964, however, she experienced mild pain between the left ear and eye. She had not been aware of a bruit or a change in visual status.

Examination disclosed the vision to be grossly intact (right eye 20/20, left eye 20/60 plus, with correction). Externally the left lid was completely ptotic. Paralysis of the right sixth nerve was unchanged. There was paralysis of the third, fourth, and sixth nerves on the left side. The corneal reflex and seventh cranial nerve were intact. The posterior segments remained normal. Auscultation revealed a loud systolic bruit confined to the left orbit and frontoparietal area. There was no pulsation of the globe, and although exophthalmometric measurements were not made, the position of the left eye was unchanged from admission. Neurosurgical consultation confirmed the findings, and an arteriogram was scheduled for the following day.

Immediately prior to arteriography the bruit could not be heard and some return of function of the left lateral rectus was apparent. Arteriography indicated a perforation in the intracavernous portion of the carotid artery. The contrast material extravasated into the cavernous sinus, with subsequent visualization of the inferior petrosal sinus. The cerebral vessels were clearly delineated, with excellent cross-filling on contralateral carotid compression. Phased arteriography would have shown the venous drainage but was not available at that time.

On March 17 the bruit remained absent and the patient reported symptomatic improvement. Paralysis of the left third and fourth cranial nerve persisted, as did the partial recovery of the left sixth nerve. The patient's condition became stable and she was discharged on March 30, 1964.

Observation during the next 18 months revealed the distant and near vision to be correctable to 20/20 in each eye by changing her corrective lenses. Intraocular pressures measured 15 mm Hg in both eyes (applanation tonometry). There was progressive improvement of the paralysis of the third and fourth cranial nerves, with complete return of function of all nerves except for minimal paresis of the left inferior oblique nerve and aniscoria. The patient returned essentially to normal and was free of symptoms.

Discussion

The occurrence of an internal carotid-cavernous sinus fistula presents a formidable therapeutic problem. Spontaneous resolution of the fistula is an infrequent but significant and fortuitous phenomenon. Sattler[4] collected 16 instances in 322 cases reported up to 1920. In 1924 Locke[5] cited 4 cures in 28 patients who were treated by bed rest. Martin and Mabon[6] reported 9 cures among 51 patients who were not treated surgically. Sugar and Meyer[7] found 4 cases from 1927 to 1939. Walsh summarized one case, and Odom[1] presented two patients who were not operated on because of being poor surgical risks. Parson and others[9] reported a case which suggested a thrombosis of the fistula as a reaction to Diodrast arteriography.

The present case presented several interesting points. The onset of the fistula one week following the injury confirmed the fact that signs may develop from hours to months after the injury and are dependent upon whether the vessel wall was lacerated or weakened on impact. Pulsation of the eye, although considered characteristic of the fistula, is not necessarily present. Although in this case a bruit was readily detectable on auscultation, it was not known subjectively to the patient, suggesting that in any case of extensive skull and orbital trauma, auscultation of the orbital area should be done to rule out the presence of a fistula. Multiple homolateral signs related to the orbital nerve following an anterior or lateral blow to the skull may signify an internal carotid-cavernous sinus fistula. A fracture of the base of the middle fossa extending into the body of the sphenoid may place traction on the carotid artery and lacerate the wall of the artery.

At present there are no specific criteria for determining which patients may have spontaneous cures, but the signs and symptoms during the initial period, the size of the fistula, and the state of the arteriovenous shunt should be considered carefully before surgical intervention is advised. Complete immobilization has been advocated as a primary course of treatment, and indeed many patients are immobilized by the degree of cranial trauma. Arteriography has been useful in evaluating the pathophysiologic picture in each case.

Although the spontaneous resolution of this post-traumatic internal carotid-cavernous sinus fistula was fortuitous, the most rational method of treatment to date appears to be trap ligation of the internal carotid artery and clipping of the ophthalmic artery if there is good evidence of adequate cross circulation[1]. It is hoped that further criteria may be developed to distinguish those cases which may respond to watchful waiting.

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Multiple Abdominopelvic Hernias

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Although much has been written about the diagnosis and repair of various types of hernias, reports of coexisting hernias in multiple sites are rare. It is the purpose of this paper to present two cases of multiple abdominopelvic hernias in elderly women, and to advance a concept which it is hoped will facilitate the diagnosis of hernias occurring in more than one site.

Predisposing Factors

Anatomic studies have shown that the lower abdominal wall presents many potential hernial sites. Among the many predisposing factors in hernia formation are muscular and fascial weakness, infections of the pelvic floor, obesity, injuries, strain, and poor muscle tone. Burton[1] and Harper[2] consider loss of weight one of the most important. These factors appear to be more common in an ever-increasing older age group.

A higher incidence of abdominopelvic hernias would be expected in women because of the relaxation and inordinate stretching incident to pregnancy. There is also a thinning of the lipomatous barrier, which normally, according to Harper[2], is a significant factor in preventing the formation of many pelvic hernias. This thinning often occurs in people past the age of 50, and particularly in multiparous women who also have lost considerable weight. Burton[2] has observed that in obese persons who have lost weight, the umbilical ligaments become relaxed and prominent, with a resultant propensity toward the formation of single or multiple pelvic hernias.

Elderly people, particularly women, are more likely to have had an infection of the pelvic floor at one time or another. Thus, the pelvic floor may be weak, another condition favorable to the development of hernias.

Symptoms and Diagnosis

In addition to a painful protruding mass, a hernia may present symptoms of small-bowel obstruction, pain due to pressure on an adjacent nerve, or symptoms related to the bladder. Often the clinical picture may not be clear-cut because various hernias may occur simultaneously in any combination.

The preoperative diagnosis of abdominopelvic hernias is not easily made. They would be suspected much oftener than they are if certain symptoms and signs related to specific hernias were borne in mind.

The signs and symptoms associated with obturator hernia are pain or paresthesia down the inner aspect of the thigh (Howship-Romberg sign), tenderness in the hip on movement of the thigh, and palpation of a mass on the anterolateral pelvic wall by rectal or vaginal examination.

The sciatic hernia—considered the rarest—produces a variable picture. It usually presents as a mass in gluteal region. If it enlarges sufficiently it may protrude below the lower border of the gluteus maximus muscle. In certain instances the first clue is a sciatic neuralgia. Watson[4] reported a case of herniation of the ureter through the sciatic notch, with signs of repeated urinary infection.

In the presence of urinary symptoms, the possibility of herniation into the bladder or protrusion of the vesical mass directly through the middle inguinal triangle must be considered.

The signs and symptoms will vary depending on the classification of the hernia. On examination each of the hernias should be considered systematically. Many hernias are diagnosed and become strangulated because this policy is not followed consistently. According to Burton, "the presence of an associated hypogastric, interstitial, or inguinal hernia should make one more suspicious of the possible existence of other herniations in the inguinopelvic region."

Illustrative Cases

During the past year two patients having multiple abdominopelvic hernias entered the Allentown Hospital, Allentown, Pennsylvania. Both cases conform to the concept presented in this paper. Both patients were multiparous women past the age of 50 years, and both had lost considerable weight.

Case 1

The first patient was a 65-year-old white multiparous woman who was admitted because of a painful bulge in the right femoral area. She gave a history of considerable weight loss. On the day following admission right femoral and inguinal herniorrhaphies were performed. After operation close examination revealed a small inguinal hernia on the left side.

Case 2

The second patient was a 76-year-old multiparous white woman who had been vomiting and suffering abdominal pain for six days. She had not been ill previously.

On admission the patient was noted to be in shock. She was described as being markedly emaciated and dehydrated. The abdomen was distended and tympanitic; no bowel sounds were heard. Masses were palpated in both femoral canals. The left femoral hernia was reducible, whereas the right was not. It was not considered to be strangulated. The findings suggested intestinal obstruction, probably of the small bowel. A flat film roentgenogram revealed distention of the small bowel. The patient died shortly after admission.

An autopsy revealed the presence of an incarcerated femoral hernia on the right, reducible left femoral and right obturator hernias, and a strangulated left obturator hernia. A loop of small bowel was noted to pass through the anterosuperior portion of the left obturator membrane. The proximal segment of this loop was noted to be extremely distended and gangrenous. There was a small rent from which fecaloid material exuded.

Comment

If a more careful examination had been carried out in these two cases, keeping in mind the possibility of multiple hernias, a correct diagnosis might have been made prior to an attempt at treatment. The cases illustrate the point stressed in this paper: that the possibility of multiple abdominopelvic hernias should be considered in the examination of all geriatric patients, particularly multiparous women past the age of 50 who have lost considerable weight.

Summary

Two cases of multiple abdominopelvic hernias in elderly women are presented. Age, multiparity, and loss of fat are cited as factors favoring the development of these lesions. The importance of looking for hernias in more than one site is stressed, particularly with regard to patients presenting the above predisposing factors.

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Acute Puerperal Inversion of the Uterus

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Acute puerperal inversion of the uterus is an uncommon but catastrophic complication of childbirth, requiring teamwork and rapid action for proper treatment. The incidence is usually given as 1 case per 20 or 30 thousand deliveries[1]. However, "the lesion is apt to be encountered so suddenly and the proper method of treatment so important that it is quite worthwhile to spend a leisure moment considering this condition against the day when it may be encountered clinically."[3] A recent experience with such a case leads to this brief summary and report.

The etiology of this condition is unknown, although the incidence is reported to be higher in primigravidas and in areas having a high rate of midwife deliveries[4]. Mismanagement of the third stage of labor has been implicated in the past, but this stage was normal in 40% of the patients in a recent study quoted by Reid[4]. Fundal implantation of the placenta combined with a true Credé maneuver brings into play the vectors of forces needed to cause inversion, but one author has seen this done on several occasions without causing any noticeable degree of inversion.

The diagnosis is often made after expulsion of the placenta, when the operator notices a purplish-red mass either in the vagina or protruding through the introitus. Shock is an accompanying feature, with the usual signs of hypotension, tachycardia, and pallor. This vascular collapse, sudden and quick, is apparently due to peritoneal irritation resulting from the inversion, as it is frequently out of proportion to blood loss[2-4].

Treatment consists of immediate correction of the inversion. The operator's entire hand is inserted into the vagina with the fingertips around the cervico-uterine junction and the inverted fundus in the palm of the hand. Pressure is exerted upward in the axis of the superior strait of the pelvis, and the entire uterus is lifted to the level of the umbilicus. This maneuver stretches the uterine ligaments, and the resulting tension will frequently open the cervix and pull the fundus back to its normal anatomic position. If an oxytocic agent has been given to hasten placental expulsion, this maneuver may

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be made difficult, another reason for withholding these drugs, if they are used at all, until the fundus has been palpated and the birth canal inspected. Antishock measures should be begun concurrently, with a large bore needle or plastic catheter inserted into a vein, immediate cross-matching of blood, oxygen supplementation, and the administration of Dextran or plasma albumin started. A corrected mortality of 12% is given in one study carried out during the era of chemotherapy and blood replacement. In unrecognized cases, mortality figures are higher.

If immediate repositioning of the uterus fails, it should be tried again with the patient under surgical anesthesia, if her condition permits. Operative measures may be vaginal or abdominal, with the abdominal approach apparently more widespread.

When the abdominal cavity is entered, the round ligaments, proximal portions of the fallopian tubes and fundus, and portions of the bladder are seen to be drawn down into the inverted area. The round ligaments and uterine walls are grasped with clamps and drawn upward, with clamps placed successively lower as more of the fundus is withdrawn (Huntington-Irving-Kellog procedure). If the ring of the cervix is too tightly contracted to permit this procedure, it may be incised posteriorly, the fundus repositioned, and the wound closed as in the case of a hysterotomy incision (Haultain operation). The Spinelli procedure is similar but is performed vaginally[1, 2, 4].

Once replacement is complete, the condition of the patient usually improves rapidly. Blood loss must be replaced and Pitocin drip should be used to insure continued firm contraction of the uterus.

Case Reports

Case 1

A 15-year-old white primigravida was admitted in labor at term. The prenatal course, past history, and physical findings were all within normal limits. On admission the hemoglobin was 9.8 gm and at discharge 9.9 gm/100 ml. The blood type was O positive. Labor progressed normally to full dilation in six hours; the second stage was also normal and lasted 35 minutes. Delivery was spontaneous, with the patient under Trilene anesthesia, and there was no episiotomy or laceration. The infant was a normal male. Gentle cord traction and fundal massage was used for the third stage of labor, which lasted 14 minutes. Following expulsion of the placenta, 0.2 mg of ergotrate was given intravenously. The operator then noted a firm mass in the vagina which appeared to enlarge and protruded through the introitus. The patient became pale, and the blood pressure fell from 120/70 to 70/40 within five minutes after delivery. The pulse rate rose to 140. Consultation was obtained; a 15-gauge plastic catheter was inserted into a vein at the wrist, and the administration of Dextran was begun. Blood was matched and the operating room was prepared. Attempts were made to replace the fundus manually on the delivery room table, but the cervical ring was tightly closed. The patient was immediately moved to the operating room. The total time between recognition of the condition and arrival in the operating room was about 20 minutes.

General anesthesia was given and vaginal replacement was again attempted, still without success.

After the patient was repositioned, a low midline incision was made, the round ligaments and uterine walls were grasped with Kelly and Allis clamps, and upward traction was applied, bringing slight improvement. The Allis clamps were replaced by towel clips deep in the uterine walls, care being taken to avoid the bladder and the tubes. The pelvis then appeared normal except where the clamps had been applied, and these areas were sutured for hemostasis, using fine catgut on atraumatic needles. The patient's condition rapidly improved, and the blood pressure and pulse were near normal at the termination of the procedure. One liter of blood was given during the operation, and instillation of a 1:500 dilution of Pitocin was continued for six hours postoperatively.

Convalescence was normal except for a persistent tachycardia ranging from 100 to 120 during the first 24 hours, and one temperature rise to 101.6 F on the first day. Antibiotics were not given. At her six weeks' examination the patient was well and the uterus was involuting normally.

Case 2

A 25-year-old white primigravida was admitted in labor at term. The prenatal course, past history, and physical examination were all within normal limits except for a previous pelvic laparotomy for unknown cause and a dilatation and curettage. Laboratory data were normal. Uterine contractions were irregular initially, but labor ensued and was completed in eight hours. A normal male infant was delivered spontaneously and a right mediolateral episiotomy was performed under nitrous oxide and ether anesthesia.

The third stage of labor, assisted only by gentle cord traction and minimal fundal massage, lasted five minutes.

A mass was noted in the vagina and uterine inversion was diagnosed. Consultation was obtained and the fundus was repositioned immediately. The patient presented a shock-like picture, with a drop in blood pressure to 60 systolic within about ten minutes. She was taken immediately to the operating room for laparotomy. The uterus was found to be partially inverted, with the left tube and ovary pulled down into the inverted area. The Huntington-Irving-Kellog procedure was used in drawing the fundus back into normal position. The blood pressure rose to within normal limits as the patient's condition improved. She was given 500 cc of whole blood during the operation, and a Pitocin drip was continued after the operation was terminated. Antibiotics were not given.

The patient has had two subsequent pregnancies, with uncomplicated prenatal course, pregnancy, and delivery. There was no apparent tendency to recurrence of the acute inversion which complicated her first pregnancy.

Comment

Neither of these two cases could be adequately treated by immediate repositioning of the inverted uterus, although this maneuver was attempted by experienced obstetricians. However, the majority of inversions can be managed without laparotomy, even when some time has elapsed. In the Huntington procedure performed on both of these patients, a towel clip was felt to be a better tractor than the Allis clamp in elevating the fundus, since better purchase could be obtained. Trauma to the uterine wall was only slightly more with the towel clip.

It seems worth while to stress again the adage that a large open bore needle or catheter in a vein is one of the most useful devices in the management of this condition as well as in any other obstetric catastrophe.

Summary

A brief review of the incidence, etiology, findings, and management of acute puerperal uterine inversion is given. Two cases illustrating this unusual obstetric complication are presented.

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Teaching of the Blind in North Carolina

EGBERT N. PEELER*

RALEIGH

In February, 1845—120 years ago—the State School for Blind and Deaf received its first students. There were eight boys and girls, who lived, ate, and went to school in a large residence. Twenty-three years later in 1868, the Negro unit was opened.

With the passing of the years both units of the school moved from one location to another, always seeking more space to accommodate more students. In 1895 the crowded condition caused the Legislature to separate the white blind children from the white deaf children by establishing a new school for deaf students in Morganton.

Early instruction for the blind consisted principally of the teacher's reading to the students, followed by a question period to determine how much the students had heard and retained. Today the major portion of instruction is through the use of textbooks, library books, laboratory practices, and other procedures which are found to be much more effective.

Early professional literature in the field expressed the desire of teachers to have a reading system that would be effective for boys and girls. The early practice of teachers reading to students was ineffective, and teachers complained that it was difficult to know when the children were listening and when they were sleeping. Through the years many different types of printing and embossing were developed for the use of blind students, including raised letters, Moon type, New York point, and Braille. All earlier systems gave way gradually to the superior system of raised dots perfected by Louis Braille in France.

Academic Courses

It has been customary through the years for the school to teach approximately the same academic subjects as do the public schools. These include reading, writing, arithmetic, geography, history, spelling, algebra, French, and so on. Instruction of visually handicapped students does not depart from the prescribed subjects in any way, but the methods used in teaching them vary a great deal.

For general instruction, the textbooks are in Braille. In teaching geography jigsaw maps in large designs are essential so that the students can understand the political subdivisions of the world. The school has jigsaw maps of North Carolina, the United States, and of all other areas of the world. On many occasions it is possible to get outline maps on heavy paper with raised dots showing the boundaries of territories to be studied.

In teaching biology it is necessary to resort to the use of models. They are used to supplement the dissection of animal life, since dissection procedures are sometimes difficult for a person who is not able to see minute parts.

The teaching of geometry presents some problems, as it is customary in the average school for all geometric designs to be drawn on paper without a third dimension. If a student is not able to use a pencil or see pencil marks on paper, the teacher substitutes various materials to teach the necessary geometric principles. Pieces of steel wire, bent and welded into the shapes of triangles, rectangles, trapezoids, etc., may be used. Likewise, she may use small pieces of materials, such as sucker sticks or toothpicks, to allow the students to form the various angles and shapes of geometric figures.

In making charts and graphs it has been found satisfactory to stick pins in a rubber base designed for this purpose, and stretch rubber bands over the pins to make the needed graph.

The teaching of mathematics requires a great deal of emphasis on mental processes,

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since it is not possible to pick up pencil and paper to make quick computations. Teachers have some gadgets and devices that can be used in the classroom to teach mathematical processes, but most of these devices are cumbersome and cannot be carried in the pocket as easily as one carries a pencil or pen.

This limitation makes it necessary for students to learn to do most of their calculations through mental processes. It is not easy to multiply 86 x 34 or 286 x 534 without the use of a pencil, but the students are taught the procedure for doing this, and they gradually develop satisfactory skill. In like manner, the handling of fractions, long division, and various other procedures must be mastered.

The ultimate goals are the same as those of the public schools, but the methods used in reaching these goals vary considerably. It is imperative that the methods and procedures be successful, as approximately one-half of the graduates of the school enter colleges throughout the State. Their preparation must be adequate so that there will be a minimum of failures in college classes.

Manual Dexterity

A visually handicapped child needs skillful fingers. Such a child may develop into a well educated adult, but the training of the mind only may leave a person in the unemployable class because of limited ability to use the hands.

The school considers the development of manual dexterity to be one of its prime responsibilities. In order to develop this skill, a variety of exercises are provided for the students from the time they enter school at the age of six until they graduate. Handicraft and shop classes provide activities ranging from the simple stringing of beads or the making of pot holders to the more intricate designs of chair-caning, woodworking, ceramics, mattress-making, and the like. It is the practice of the school to give students experience in a wide variety of skills rather than attempting to develop a high degree of proficiency in one or two fields.

In some instances courses taught for the development of dexterity may become vocational; however, this is not the primary purpose of the school. As a rule, final vocational placement is determined after a student graduates; but many of the skills taught at the school will be useful in any vocation.

In some courses such as home economics there is a two-fold goal. The home economics classes, of course, give instruction in homemaking but also provide training in finger dexterity. This includes sewing by hand and machines; mixing, cleaning, and preparing foods; house-cleaning, and other related activities.

The average public school teaches home economics for two or perhaps three years. The School for the Blind offers instruction for a total of six years, covering the junior high and senior high grades. This extra time is needed to develop the necessary skills for good homemaking. Most of the students ultimately marry, have homes and children; and all of the skills of home economics are needed.

Music

Many of the beauties of daily life that are available to those who have good vision are denied to a totally blind person; for example, the beauty of new leaves and flowers in the spring of the year or a pretty girl walking across the street. Inasmuch as these pleasures are not available to visually handicapped people, the school considers it important to teach as much music as possible in order that the maximum appreciation of auditory beauty might compensate for some that is lost by the lack of vision.

In addition to the regular vocal music program, all children are given an opportunity to have piano, violin, or band instruments. To some extent piano is a required subject. Students with very limited ability are not required to continue studying piano indefinitely; but all of them are given piano instruction, as this is considered basic to a satisfactory knowledge of music.

In rare instances a musically talented student may use the training at the school for vocational purposes, but our main purpose is not to develop professional musicians; it

is to develop good music consumers. Our hope is that every student will leave school with a greater understanding and appreciation of music, so that throughout life he will derive greater pleasure from radio, television, church music, concerts, and other sources of music.

Physical Education

It is easy for a visually handicapped person to develop into a lazy, rocking-chair type of individual, with round shoulders and sagging stomach; a person who shuffles when he walks and presents a generally unattractive appearance to the public. A good physical education program can eliminate many of these deficiencies. The Morehead School for the Blind requires all its children to participate in regular physical education classes, beginning with kindergarten and continuing through high school. The program includes a graduated schedule of activities to meet the needs of all ages, but the program is organized around practices which are somewhat different from those of the public schools. The teachers use folk dancing, games adapted to the blind, tumbling, relay racing, and many other types of exercise in which visually handicapped students can participate actively. The school has a swimming pool that is used for both physical education and leisure-time enjoyment.

Some of the interschool sports such as football, basketball, and baseball are not practical for visually handicapped students, but the school has a superb wrestling team. This is one sport in which blind students can compete on an equal basis with sighted ones. During the past winter the school participated in 14 wrestling matches with public high schools in Eastern North Carolina and won approximately half of them.

The school also has a track team which competes with other schools for the blind. Not all track events are practical, but some can be executed with a great deal of skill. The 75-yard dash is made possible by stretching a ¼-inch steel cable the length of the running area. A ring about 6 inches in diameter is place around the cable. The student, while running, holds onto this ring and is guided from the starting point to the finish.

Baseball has many adaptations. As a rule, it is played with a rubber ball about the size of a basketball. The batter hears the ball coming and swings his bat about 6 inches above the ground, usually while kneeling on one knee. As soon as he hits the ball, he jumps up and runs to first base. If he is totally blind, another student may grab him by the hand and the two run the bases together.

Medical Care

Since the children are away from their homes during a major portion of the school year, it is necessary for the school to provide proper medical care. The school has a practicing physician who comes to the campus each day or communicates with the school nurse as needed. A registered nurse and a practical nurse are on duty at all times. When sick, all children are treated in the infirmary under the care of the nurse. The school also has doctors who render special services related to the eyes, ears, nose and throat, but many students are referred to their home physicians for treatment and care.

Social Life

Most people are able to learn the social amenities with a minimum of difficulty by watching other people. This may be impossible for visually handicapped students, and makes it imperative that the school devote specific time and training to this purpose. Day-to-day and week-to-week schedules offer many social opportunities to help the boys and girls develop sensible, pleasant relationships with each other. Specific periods are set aside for dates. Dances are scheduled from time to time for different age groups. Dress-up dinner parties are also scheduled, with preliminary periods of introduction into proper etiquette for the occasion. There are many phases of social life which must be taught specifically to visually handicapped children in order that they may feel relaxed and competent in the average social situation.

Library Services

The center of any good school is its library. In order to provide satisfactory services to visually handicapped children, it is necessary to have a much broader range of library materials than those in public schools. The first requirement is a satisfactory number of Braille books for leisure-time reading and classroom assignments. Many books, however, are not available in Braille. This means that a print library of such books must be available to enable teachers to report needed passages to the children. There must also be a library of printed materials for the benefit of teachers who want to investigate particular topics.

The use of talking books has grown, making it necessary for the school to have a library of these records.

From time to time we have students with borderline vision who may be able to read some printed materials. In some instances, it is possible to send these children back to public schools after a satisfactory degree of visual reading has developed. This requires a small library of reading books in extra-large print.

Conclusion

If time permitted, we could tell about instruction in typewriting, beginning in the fourth grade; medical transcription, which is offered to high school students; instruction in orientation and mobility; and psychological counseling, vocational guidance, and other phases of work at the Governor Morehead School. To those who would like to learn more about the school, however, we offer a cordial invitation to visit the campus and obtain first-hand information for themselves.

Acknowledgement

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A Brief History of Mental Health Care in North Carolina

Karl W. Stevenson
Winston-Salem

The territory encompassed by the history of mental health care in North Carolina is broad and often obscure. In order to define the subject more sharply and avoid a dull recital of names and places, this paper will trace the evolution of thought concerning mental health care in this state, especially as reflected in the annual meetings of the Medical Society of the State of North Carolina.

Miss Dix's Memorial

When Dorothea Dix visited North Carolina in 1848, the care of the insane was left to the devices and capabilities of the families or communities in which these people found themselves. That their treatment under these conditions was generally unenlightened, often deleterious, and sometimes cruel was the primary emphasis of Miss Dix's "Memorial to the North Carolina Legislature" in November, 1848. Speas (1961) stated that during the ensuing years "the impassioned pleas of Rep. James C. Dobbin were responsible for the eventual almost unanimous passage of a law for the establishment of the hospital in Raleigh."

The North Carolina Hospital at Raleigh opened in 1856, with facilities for the care of 256 insane patients. The facilities proved ample for the needs of all applicants until 1866, when the press of returning soldiers and the stress upon a conquered land so increased the rate of mental illness that once again its victims had to be cared for elsewhere. The constitution of 1865 provided for the state care of all insane, blind, and deaf-mute persons. The first laws under this constitution provided treasury support for the home treatment of the insane. However, the rapacity of the people was such that fraud became widespread, and the state fiscal structure was threatened. The legislature then passed laws assigning the care of the insane to the counties except for (1) recent cases with prospect of recovery, (2) patients who were violent to the point of endangering the community, and (3) those adjudged insane when arraigned for a crime (Taylor I., 1891).

It would appear from the absence of papers on the subject that the treatment of the insane was not an item of concern to the medical profession during the Reconstruction period. Despite this indifference, it appears from later papers that the idea that mental disease was treatable gained acceptance during this period. The primary methods of asylum treatment were rest, treatment of physical disease, and occupational therapy. It was recognized that early treatment increased the chances of recovery and that asylum care was better than that available in most homes, and certainly better than confinement in jails or county poor houses. The "cure rate" during this period was something in the neighborhood of 30% to 40% of admissions. Nevertheless, considerable social stigma was attached to confinement in the asylum. Roberts, in 1884, reported a growing demand for home care as one of the reasons that it was necessary for the general physician to make a study of insanity.

For editorial comment see page 518

Early Society Papers on Mental Disorders

The first paper on mental disease reported in the *Transactions of the Medical Society of the State of North Carolina* was entitled "Report of a Case of Violent Cerebral Excitement Relieved by Bromide of Potassium," and was presented by W. T. Cheatham, in 1871. This case involved a 5-year-old boy whose delirium and convulsions continued in the presence of falling pulse rate and temperature. Finally, after exhausting all standard remedies, the author successfully prescribed an oral dose of bromide of potassium.

The next paper revealed an increasing concern with the medicolegal problems involved in the growing recognition that man is not always fully in possession of his faculties. The tenor of Grissom's lengthy paper entitled "Mania Transitoria" seems to have been directed toward convincing the gathered physicians that momentary insanity is possible, that it may occur in the most unsuspected people, and that these people may be fully aware of their surroundings and actions in all or only one area of life during their transitory mania. He endeavored to show that "mania transitoria" is related to heredity, certain physical diseases, and the accumulation of harbored feelings over a number of years; and that it is precipitated by some current increase in stress or decrease in resistance to impulse. He also felt that the condition might be related to masturbation and petit mal epilepsy.

Papers appearing during the 1880's reflected a growing concern about the inadequacy of state care for the insane in North Carolina, from the standpoint both of humanity and of treatment. From these papers it appears that the building of new hospitals —they are now called hospitals, not asylums —at Morganton in 1883 and Goldsboro in 1881 was based on inadequate estimates of the population of insane in the state. So, while facilities for care increased from 254 in 1880 to 1,000 in 1890, the known total unprovided for in hospitals was not decreased. This determination to provide humane and proper treatment for all the insane reached its climax in 1889, when President T. D. Haigh implored the members of the State Medical Society to support legislation to increase this care.

The eighties and nineties were a period in which speakers before the State Society seem to have been supremely confident of the high quality of care at our state hospitals for the insane. President Haigh remarked on the absence of physical restraint, and others spoke in glowing terms of the cleanliness, healthful diet, and congenial atmosphere present in these institutions.

Hospital care during this period was costing the state $167.78 per year per patient, as compared to $303.73 in 1871. Taylor (1881) ascribed this reduction to the spreading of administrative costs. At the same time, the insane were costing the average county $85.78 per year; and this care was universally condemned as inadequate and often harmful. An exception was Watauga County, whose responsible official spent $48 per patient per year for "adequate care." Since the patients under county care were not always "harmless and incurable," several speakers contended that with only a slight increase in cost to the community, immeasurably better care and a chance to recover could be provided by treating all patients in state-supported institutions.

Changing Concepts of Etiology and Treatment

The spread of hospitals for mental disease throughout the country and the growing acceptance of the concept that such disease could be cured if detected early enough and treated efficaciously, prompted a closer study of insanity in its various forms. In 1887 J. D. Roberts defined insanity as "the psychic manifestation of disease of the body unaltered by loss of consciousness." He stated that the proper medico-legal definition of insanity was a "disease of the body affecting the mind by deranging faculties and causing such impairment of healthy intellect, emotions, or will as to render the individual irresponsible." He felt that advances in knowledge of the psyche depended upon study of physiology.

At this time Roberts divided insanity into three forms—mania, melancholia, and dementia. He subdivided dementia into two types: (1) the "terminal stage of nearly all insanities assuming chronic form instead of recovery"; (2) a primary type producing "a vacant meaningless expression of countenance originating from a severe shock to the nervous system or emotional centers as from direct injury to the head." In addition, he recognized that many milder cases went unrecognized. He felt that these patients exhibited the premonitory signs of more severe disease which, if detected and treat-

ed early, might result in cure rates as high as 50%.

In the same speech Roberts stressed the role of heredity in the etiology of insanity. But his concept, while containing the seeds of some modern thought, went beyond the bounds of most of today's theories when it included all severe diseases which "may degenerate into insanity in offspring" through lessening their nervous vitality. Nevertheless, he recognized that, while the body must not be neglected in treatment, the disease was often a response to the strain of "active competition in the race of life."

In keeping with Roberts' concept of the physiologic origin of mental disease, I. W. Faison presented a paper to the assembled North Carolina physicians in 1890 in which he ascribed hystroneurosis to the "physiologic and pathologic derangement of the uterus and ovaries producing a shock in the nervous system." As treatment he suggested palliative "nervines, tonics, sedatives, and galvanism." To treat local bleeding from a congestive cervix, "a primary cause of hysteria," he advocated the use of cauterization with carbolic acid.

Despite the low per capita expenditures and wholesale neglect of more than half the mentally ill in North Carolina, the cost of disease, then as now, was great. Murphy reported in 1895 that one third of the total state revenue was going for maintenance of the insane in mental hospitals. He stated that, while some home care had the advantage of avoiding the stigma attached to treatment in a state hospital, there were few forms of the disease (for example, "acute primary dementia, some cases of puerperal mania, mania transitoria, and delirium tremens") which could be properly treated at home. He listed the treatments used at Morganton, where he was superintendent: bed rest; occupational work, exercise, and amusement; seclusion and mechanical restraint (only in extreme cases); good hygiene; and various "generally non-effective" medicines. For Murphy the prime advantage of hospitals as opposed to home care was the failure of families to supply the discipline essential to the "production of quiet patients—the mark of the best hospitals."

This last statement reflects the passage of the concept of active treatment of the mentally ill and the acceptance of the custodial role for state hospitals, a trend which only recently has begun to be overcome. Despite the lack of emphasis on cures, Murphy reported that Morganton's "cure rate" was 39% during its first 12 years as opposed to a national average for state hospitals of 27%.

In his 1895 speech Murphy proposed a system of outlying farms tended by patients and supervised by hospital personnel as a cheap and effective means of caring for the increasing number of insane. In 1900 Henry W. Lewis proposed, and the State Medical Society adopted, a resolution calling for the provision of state hospital facilities to eliminate the need for continued and increased use of county homes and endorsed Murphy's "Cottage System." In 1903 a cottage for 30 patients was opened in Morganton with great success in terms of happier and more productive patients. By 1906, when Murphy again reported to his colleagues, the program had been expanded to provide for 75 patients at one location. This expansion was, in his words, "a mistake." Nevertheless, the program had proved its usefulness and may be regarded as a forerunner of the "cottage system" now in vogue in our more progressive institutions.

Prophylaxis

Despite the continued growth of the state hospitals, they were falling farther and farther behind in their efforts to provide adequate care of all the insane. Murphy (1906) reports that in 1880 there were in North Carolina 1,500 white insane persons, of whom only 750 were in hospitals. By 1900 the mentally ill included 4,000 white patients, with only 1,500 in hospitals.

During this time recognition of the causes of mental illness was expanding. McCampbell reported on pellagrous insanity in 1908. Physicians were beginning to recognize syphilis as a preventable cause. In 1910 Paul V. Anderson began a series of lectures

on the necessity for early recognition of the premonitory signs of dementia praecox in children.

Over the next 20 years Anderson's numerous speeches on this subject must have made physicians more aware of the need to promote mental and physical health equally, especially among the children of neurotic parents. He advocated a close watch on school work and the elimination of physical obstacles to performance. He encouraged the separation of defectives, the stimulation of laggards, and the prophylactic removal of nonacademically oriented pupils from the strain of school work. The development of the play principle in children as a device for promoting active decision as opposed to inactive thinking was a central tenet of Anderson's concept of proper child care. Children who read too much, had few friends, and no confidants were the object of his concern. He felt that sex education was essential to mental health in adolescence. All these things, he felt in 1910, were necessary adjuncts to the proper protection of our children's mental health.

Despite his emphasis on prophylaxis and his role as a state hospital administrator, first at Morganton and then in Richmond, Virginia, Anderson took the conservative position in a 1913 speech to the gathered physicians. At that time he felt that insanity was not increasing, despite the increase in the hospital population. Rather he saw an increase in chronic cases, in diagnosis, and in state care. Further, he expressed a progressive point of view in a puritanical age when he stated that alcoholism, syphilis, solitary sexual practices, illegitimate pregnancy, and so forth, were incidental occurrences or symptoms associated with insanity. Nevertheless, he stated that despite the pre-eminent influence of heredity, proper care and environment could prevent insanity in the predisposed.

Support for Anderson's position on the need to develop strong and decisive minds came from J. Allison Hodges in 1913, when he spoke on "The Conservation of Nerve and Mental Health." Hodges was much concerned that while "one might by power of his mind evoke the action of another man's muscles, he could seldom with muscles obtain the use of another's brain." Hence he was for mental hygiene—"the avoidance of vicious habits, injurious thought, germs, and diseases (alcohol, syphilis, and cardiovascular and renal disease)"—and the development by education of the ability to "control thought to modify (one's) character and external surroundings or their effect on self development."

The following year Hodges offered a conservative evaluation of the principles and practice of psychoanalysis. He felt that it offered a great deal in theory, but that for the average physician its methods were uncertain and often inapplicable. Besides, he thought, a careful study of the patient's history might provide as much information as an analysis of his dreams.

Progress in Education and Community Action

In 1913 the first North Carolina state mental hygiene society was organized through the efforts of Clifford Beers. For unknown reasons this organization failed after World War I, but it planted the seeds which sprouted first as a community mental health clinic and a local mental hygiene society in Charlotte in 1932. The second flowers bloomed in Durham the same year with the founding of a professorship in psychiatry at Duke University School of Medicine and the beginning of instruction to junior and senior medical students.

Numerous foundation blocks in our present system of mental health care were laid in 1936. Mental health societies were founded at Durham and Kinston. The state Mental Hygiene Society was organized in Charlotte and chartered in Orange County. The legislature appointed a commission to study mental health in North Carolina. This study was sponsored by the Rockefeller Foundation, directed by Dr. Lloyd J. Thompson, and published in 1937.

The problems posed and the excitement created by this study provided the impetus for action in community clinics as well as public education and legislative action. This

document appears to have laid the foundation for later state efforts to provide adequate care for its mentally ill, for example, the opening of John Umstead Hospital at Butner in 1947 and the expansion of facilities following the $22 million bond issue for this purpose in 1953. Additional stimulants during this period were provided by the founding of departments of psychiatry at Duke in 1939, Bowman Gray in 1946, and the University of North Carolina in 1951; and the advancements in understanding and pragmatic treatment growing out of our experience in World War II.

Most recently, state efforts have been directed toward the establishment of community mental health clinics and general hospital psychiatric wards for the prophylaxis and early treatment of those seeking short-term and outpatient care, as well as patients returning from psychiatric hospitals to the community. Both of these types of treatment have been made increasingly feasible and desirable by the advent of tranquilizing and stimulant drugs, and by the increasing toll that our society imposes on the psyche of its members through both the severity and prolongation of stress.

Growing Medical Enlightenment

In preceding paragraphs we have scanned the major developments of approximately 50 years of mental health care in North Carolina. This period has been marked by an increasing number of recognized cases of mental illness, until today we know that one out of every ten people will be hospitalized for these diseases during their lifetime. With this knowledge has come awareness of the interdependence of mental and physical disease and the striking fact that more than 50% of all complaints received in doctors' offices have an emotional basis.

These concepts have not always been well received and more than once have aroused considerable rancor. Yet, surprisingly, the papers presented to the Medical Society of the State of North Carolina have consistently been on the leading edge of this movement, and then only in discussions of ways and means were doubts and questions raised, never in terms of principles. In conclusion, then, I shall present evidence of the growing diagnostic acuity of our physicians during the period up to the 1938 issue of the *Transactions,* which is the last to contain texts of presentations at the annual meetings of the Society.

In 1918 H. D. Stewart surveyed "Present Medical Conditions in North Carolina," but did not mention insanity or mental illness. The 1921 issue of the *Transactions* contains four relevant papers.

W. C. Ashworth defined neurasthenia as a "blanket term to cover our ignorance of a functional disorder which is difficult to diagnose without careful and painstaking examination." He pointed out the role of organic disease in its etiology and stressed the role of emotional strain in producing the physiologic fatigue which is the immediate cause of the neuronal lesion. His treatment included therapy for the organic disease, rest in isolation, massage, electricity, hydrotherapy, forced feeding, and sundry drugs. But he stressed that equally important was the atmosphere of confidence in recovery created by the nurse and doctor.

At the same meeting James K. Hall presented a paper "On Rebellion Against Oppression," in which he analyzed the role of psychoanalytic theory in the understanding, and psychoanalysis in the treatment, of various mental disorders. He stressed, in this connection, the broad meaning and interpretation of Freud's definition of sex as the primary source of repressed material which, in rebellion against oppression, produces psychoneurotic disturbances.

Hysteria was the topic of a paper by Frederick R. Taylor. This paper consisted largely of an expansion and explanation of Janet's definition of hysteria as "a form of mental depression characterized by retraction of the field of personal consciousness and a tendency to dissociation or emancipation of systems of ideas and functions that constitute personality." He advocated the use of psychoanalytic techniques and stated that the experience of World War I showed that anyone could acquire the disease if subjected to sufficient amounts of the right kind of stress.

Tom A. Williams defined emotions as a "response in the body without reactions on the environment," and stated that every emotion is accompanied by physical changes.

The concept that mind and body are intimately connected in health and disease was furthered by articles by Osnato (1925), who showed that proper matching of personnel with job stress and responsibility could have reduced the incidence of mental breakdown in World War I; Mallet (1926), who strongly pointed out the power of suggestion in producing cure of disease; and McBroger (1926), who demonstrated the relationship between stress and mental disease.

Also in 1926, James W. Vernon presented a paper entitled "Circular Insanity," which described the essential elements of the manic-depressive cycle fully as well as any paper would today. At this time the author stated that patients with this condition comprised from 10% to 20% of the insane in the United States and that 80% of the cases had a significant hereditary background.

The realization that many people not confined in hospitals are actually mentally ill was given impetus by L. G. Beall in 1927, when he described "Social Misfits as Seen by the Alienist." Mental disease, he said, was the "expression of maladjustment to some problem of life." This failure might be due to lack of mental stability—a hereditary trait—or to lack of proper training resulting from an unfavorable environment. "Heredity is the foundation upon which the environment erects the superstructure" of personality. From these statements he went on to stress the importance of the early years to the proper development of mental health and to reprove equally parents who pampered and parents who deprived their children.

The next advance came with realization of the importance of interpersonal relationships to the development of the personality in health and disease. This relationship was expressed by Ernest M. Poate (1933). Speaking on the first instruction in psychiatry given at Duke University School of Medicine, he said that "behind every neurosis lies some maladjustment, some marital or social unhappiness or familial problem," and pointed out the efficacy of the team approach to successful treatment.

Interdependence of Psychiatry and General Medicine

Growing awareness of the interdependence of psychiatry and general medicine is reflected in papers presented by practitioners of each during the years 1927-1938. These speakers solicited the aid of all physicians in the early diagnosis and treatment of mental, organic, and functional disorders. Such cooperation was necessary because it was becoming increasingly obvious that the psychiatrist could not do the job alone, that physical disease often resulted from emotional distress, and that prophylactic medicine was in these as well as other diseases the best medicine. These ideas were given expression in papers by Wingate M. Johnson, Jasper Steward Hunt, and Edward A. Strecker.

In a paper entitled "The Emotional Factor in the Practice of Medicine," (1934), Johnson traced four cases in which he had found a knowledge of the patient's emotional and psychological history useful in determining the cause and treatment of a physical complaint.

Hunt's paper, "Certain Responsibilities of the Pediatrician Towards the Production of a Happy Adult," stressed the pediatrician's role (1) in educating parents in the proper performance of their duties and imbuing them with a sense of confidence in their competence as parents; (2) in recognizing the early signs of disruption of orderly psychologic as well as physical development; and (3) in counseling with parents, teachers, and the child with the object of removing any impediment to his normal healthy development.

Edward A. Strecker, the eminent lecturer in psychiatry at the University of Pennsylvania Medical School, delivered the guest lecture to the Society in 1938. His topic was "Functional Illness and the Medical Psy-

chology Needed by the Practitioner in Its Treatment." His threefold thesis was (1) that the physician must treat the whole patient, not just 50% or 75% of him; (2) that when the ordinary tests for a given complaint have been exhausted, no pathology is found, and a psychologic overlay is present, it is a mistake to continue looking for physiologic disease or to embark upon "whimsical therapy; and (3) that functional illness and functional overlay to physiologic illness can be successfuly treated by the general physician. He indicated that the techniques of "common sense psychology" were (1) providing an opportunity for the patient to talk over troubles with the doctor; (2) explaining simple underlying mechanisms and encouraging the frank facing of their implications; (3) correcting faulty mental attitudes; and (4) making slight adjustments in the environment. In connection with the fourth point he said: "A medical man who is not willing to get into trouble in an effort to correct a bad environmental situation had better not practice medicine or had better confine his efforts to the cloistered precincts of the laboratory."

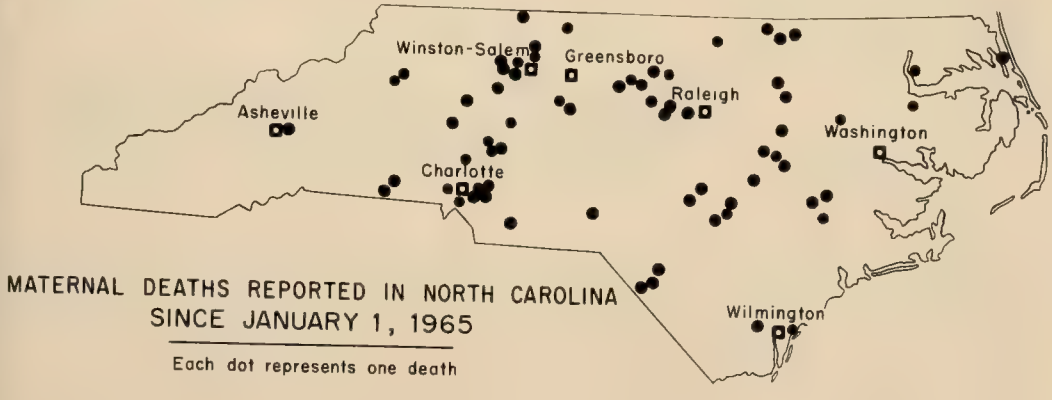
Dr. Strecker received a standing ovation at the conclusion of his talk. His message would undoubtedly be equally well received today. And yet the fact is that the medical profession is being roundly criticized by the public for its failure to apply the concepts that Dr. Strecker so eloquently espoused in 1938. Why?

Conclusion

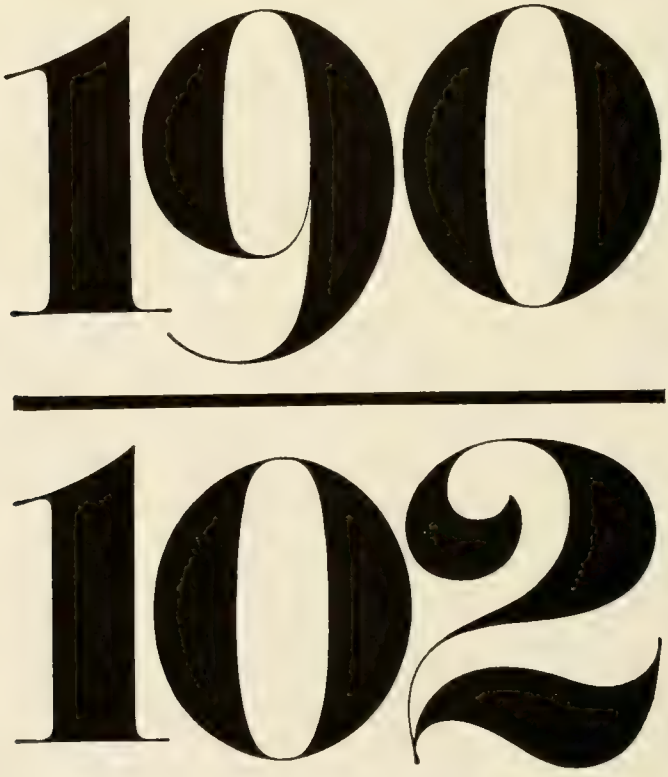
By 1938 the role of the mind in the production of somatic disease was recognized and taken into account in diagnosis and treatment by our better physicians. The need to promote prophylactic mental health programs was increasingly recognized by both the physician and the community. Our state hospitals for the mentally ill were laying the foundations for the breakthrough and the expansion of treatment programs that were to come in the next two decades. From dark unheated cells to modern milieu therapy, from chains and manacles to Stelazine, from public ridicule and scorn to growing personal acceptance, mental health has come a long way in the last 100 years of North Carolina history.

But this is really only the beginning, for we have yet to find a cure for mental disease. Today we are only beginning to treat symptons. We have much to learn before we understand the natural history or the etiology of these disorders—the most crippling and costly of all the "diseases the flesh is heir to."

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NOVEMBER, 1965

THE QUININE SQUEEZE

"Better things for better living through chemistry" is Dupont's slogan, and a good one, too, for the most part. There are times though, when Nature's chemists are still needed to help us deal with Nature's tricks, and we are currently getting an object lesson in the truth of that observation.

The first of Nature's tricks involved human nature, in the form of the volatile politics of the Congo and of Indonesia, two prime producers of quinine. Adding to the suppression of production from that source was decreasing demand for quinine as it was replaced by synthetic antimalarial drugs. Now Nature comes with its second trick—that of drug resistance on the part of certain strains of malaria, with quinine the only available method of treatment, and that in large doses given intravenously. The juxtaposition of the two indicates increased demand and decreased supply, guaranteed to mean trouble in the form of higher prices.

The drug companies point out that they held the price as long as they could, but now have to pay from five to six times the former price for their supplies and must pass the increase on to the consumer. Relief is not in sight. Quinine trees take seven years to reach a size suitable for harvesting. Processing is not done anywhere in the United States. The wild trees of Central and South America that were the original sources of the Jesuit's bark are of low yield, a fact which increases processing costs. There does not seem to be any danger of an actual shortage of quinine and quinidine, but prices will remain high until alternatives to present supplies are developed.

* * *

THE SILVER SHORTAGE

The November 1 issue of the *Journal of the American Medical Association* had an article on recovering silver from x-ray film processing, and discusses the potential effects of the world-wide shortage of silver on the use of x-ray examinations. Apparently the disparity between silver production and consumption is so great that even had there been no silver in coins, the consumption of silver would have exceeded free world production by 133 million troy ounces in 1964. Obviously something has to give, and in Dr. Wilson's opinion the day may come when rationing of x-ray films and higher prices will be used to decrease the taking of radiographs.

Dr. Wilson also regards somewhat glumly the prospects of voluntary conservation of x-ray films, noting that "The United States has been a land of plenty for so many years that it may be difficult to re-establish an ethic of conservation." To which might be added that the trend in advertising is to encourage conspicuous consumption, and added to this exuberant atmosphere is the rapid growth in the sale of "disposable" items. The peak of development in office

and household aids seems to be in making them disposable, so that one glorious toss at the wastecan relieves one of further responsibility. The abandon of this approach on the one hand, and the need to conserve silver on the other, provide an uneasy contrast, and it is the saving of silver which is likely to suffer. Probably our experience with human nature should lead us to intensify the search for silver substitutes, or the elimination of conventional x-ray films, rather than waste much time in conservation. There is one saving note, though. Reclamation of silver from processing fluids promises some income, always a good motive.

* * *

A NEW JOURNAL

In October a new controlled-circulation journal put forth its first issue. *Medical Opinion and Review* intends to be different, in not obsessively reporting the latest medical development, or publishing review articles, summaries, economic information, material for the house officer, pediatrician, surgeon or other specialist, or duplicating any of the many other types of journals currently in existence. On the positive side, it intends to publish analytic reviews of new books, essays on matters of moment in medicine, columns on the arts, especially music, and in general to appeal to the reflective side of the physician's life. Hopefully, he indulges himself enough to have one.

The new journal goes to private practitioners of general medicine, internists, obstetricians and gynecologists, psychiatrists, and the professors of those disciplines in the medical schools, as well as full-time hospital specialists in the fields named. The first issue reflects the probable tastes of this audience quite well.

In a recent issue of his syndicated column, Sidney Harris remarks upon the fact that physicians are frequently involved with the arts and are often skilled in performance, especially in music and painting. A number of physicians have left practice and become novelists, for instance, and a number of novelists have had some training in medicine. To Harris, this means that there is still a lot of art, as opposed to science, in medicine. An alternative explanation is that, by and large, physicians are interested in people and sensitive to their needs and aspirations. It is to this side of the physician that *Medical Opinion and Review* is aimed. It will be interesting to see how it fares.

* * *

THE HISTORY OF MENTAL HEALTH MATTERS IN NORTH CAROLINA

A measure of our own egotism is to be surprised that our forebearers held ideas which seem so modern that they could only have occurred in the present enlightened generation. In Mr. Stevenson's paper, the words of our North Carolina professional forebearers come to us with messages which are sometimes quite modern. The very volume of concern is gratifying, and the "Transactions" turned out to be a good source for an annual report on what the physicians of the state were concerned about, in this and other matters.

When one wonders what virtue there is in recording the activities of the Society, and the expressions of its members, review of a paper like Mr. Stevenson's is a help. The perspective it gives, and the interest it holds, would not be available without these published accounts. It is to be hoped that the present JOURNAL will serve other generations as well.

* * *

The President's Page

Public Law 89-239 — A North Carolina Responsibility

On the day before President Johnson underwent his recent surgery, he signed into Law the bill intended to better the general health of our people by providing for the continuation of medical education and the improvement of medical care. This was the result of what is known as the report of the DeBakey Commission, and now known as Public Law 89-239.

Organized medicine had many objections to this report, differing in the philosophy which supported it and not being convinced of its demonstrated need. Nevertheless, after some 20 amendments made at the suggestion of AMA's Advisory Group to render the legislation "less objectionable," Congress passed the bill and it became law. Now, as was Public Law 89-97 (Medicare), this Act has become the product of the democratic process.

Under the provisions of this Law we, in North Carolina, have the opportunity to participate in its benefits. Only if we make voluntary application for these benefits will we have the opportunity to participate. And we shall have the opportunity only if we demonstrate that we have sound planning and meet the established requirements for participation.

Before the final obvious passage of this Bill, your Executive Council authorized your President to appoint three members to represent the Society to work with the deans of our three medical schools in preliminary exploration of the problem. This was done and they have met. Your President met with them in an ex-officio capacity.

It would appear that North Carolina has a unique opportunity. Far from being what was implied in the recommendations of the original DeBakey Commission's reports, the Act offers, with AMA's approval, something we can live with. To participate is only upon our own expressed wish. If after appropriate study and planning we find it unfeasible in our predominantly rural state, or if there is evidence of undesirable centralized administration, we have the privilege of rejecting participation.

Just now I should like to point out the opportunity the Medical Society of the State of North Carolina is offered. First, it has the chance to assume a role of leadership similar in some respects to that it assumed in the matter of Hill-Burton hospitals, which even now redounds to its credit across the United States. Our medical schools enjoy mutual rapport of such a nature as to make this opportunity one of coordinated, synchronized, and useful collective effort. The Medical Society, too, enjoys close liaison with the medical schools, which will assure that any action taken will have mutual consideration and support.

At this time it is hoped that the full membership of the Society will give its support to the planning necessary for meeting the requirements to allow North Carolina, and all its citizens, to have a part in this program. North Carolina, apparently, is in a position to receive favorable consideration for the benefits of the Bill on Heart, Cancer, Stroke, and related diseases. The Law as enacted has as its purpose:

"(a) Through grants, to encourage and assist in the establishment of regional cooperative arrangements among medical schools, research institutions, and hospitals for research and training (including continuing education), and for related demonstrations of patient care in the fields of heart disease, cancer, stroke, and related diseases; (b) To afford to the medical profession and the medical institutions of the Nation, through such cooperative arrangements, the opportunity of making available to their patients the latest advances in the diagnosis and treatment of these diseases; and (c) By these means, to improve generally the health manpower and facilities available to the Nation, and to accomplish these ends without interfering with the patterns, or the methods of financing, of patient care or professional practice, or with the administration of hopsitals, and in co-

operation with practicing physicians, medical center officials, hospital administrators, and representatives from appropriate voluntary health agencies."

In Section 902, under "definitions," we find our community hospitals in a position to receive benefit. "A Medical Center is defined as a Medical School or other medical institution involved in postgraduate medical training. The term 'hospital' means a hospital . . . or other health facility in which local capability for diagnosis and treatment is supported and augmented by the program".

Under Section 903 the Surgeon General is authorized to make grants to assist in planning the development of regional programs. Grants will be approved only if application, voluntarily made, gives assurances that the provisions of the Law will be met.

I invite your studied consideration of the Act in question. I also invite your studied and purposeful consideration of the part our medical schools, our community hospitals, and our membership can have in the implementation of this program. We recognize that there is a basic, fundamental, difference in the attitudes of those in the Ivory Tower and those not confined to it. But here we have a field on which we can gather, iron out our problems, and be of everlasting benefit to both. The result will bring modern medical care closer to all of our people in North Carolina.

GEORGE W. PASCHAL, JR., M.D.

U. S. Doctors Volunteer Services to Vietnam Civilians

The number of American doctors in Vietnamese provinces will soon be increased through a joint effort of the Agency for International Development and a new voluntary organization known as "Project Vietnam."

Under the program, American doctors will volunteer for two months' service in Vietnam. The program will provide 20 doctors at a time and will more than double the number AID has assigned to Vietnam at the present time. It was created in response to the President's request for more U.S. medical assistance for Vietnam. Project Vietnam is being administered by The People-to-People Health Foundation, Inc., Washington, D. C.

Project Vietnam will provide transportation and a monthly subsistence allowance for each doctor. An AID contract signed recently with the voluntary organization will call for an expenditure of $500,000 a year over a three-year period.

The new Project Vietnam volunteers will first join the American physicians, augmenting their staffs, and then move out into other areas of the country.

Seven other countries have sent teams of doctors to Vietnam: Australia, Holland, Italy, Korea, New Zealand, the Philippines, and Taiwan. Each is represented by a team of two to four doctors, and the Philippines by three teams in the field.

The new organization will review applications from volunteers. Requests for information should be directed to: Project Vietnam, 2233 Wisconsin Avenue, N.W., Washington, D. C., 20007.

Review of "Good Samaritan" Symposium Available

A comprehensive, 32-page booklet reviewing the Good Samaritan symposium at the University of Chicago is now available. The booklet, entitled "The Good Samaritan and the Bad", attempts to capture the essence of what was said at the conference in the words of the participants.

The Law School of the University of Chicago, in conjunction with Sentry Insurance, Stevens Point, Wis., called this conference to examine and fully review the legal and sociologic aspects of our society's mounting "I'd rather not get involved" attitude. Cases in point—like that of Kitty Genovese of New York who was murdered in full view of 38 witnesses, not one of whom even called the police—were discussed by experts in the law and various other fields related to the issues.

Anyone interested in obtaining a copy of the booklet should write Sentry Insurance, Stevens Point, Wisconsin.

Anxiety Symptoms Featured In Film On New Drug

The symptoms of patients suffering from chronic and acute anxiety are depicted in the new film, "Recognition and Management of Anxiety," available from the Wyeth Film Library. Clinical interviews present a wide variety of patients and their physicians discussing symptoms and describing the effect of psychotherapy and of SERAX (oxazepam, Wyeth Laboratories) on the anxiety syndrome.

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Correspondence

THE BETSY FUND

To the Editor:

The attached news release on the Louisiana State Medical Society Betsy Fund is self-explanatory. We would appreciate it if you would publish this release in your *Journal* or other appropriate publication.

H. Ashton Thomas, M.D.
Secretary-Treasurer

* * *

The Louisiana State Medical Society is soliciting contributions to a "Betsy Fund" to aid physicians whose offices and homes were totally destroyed by Hurricane Betsy.

Dr. Charles B. Odom, president of the society, said, "we already know of three members of our Society residing in areas below New Orleans who were completely wiped out by the hurricane. The purpose of the Louisiana State Medical Society Betsy Fund is to assist these physicians in getting reestablished as quickly as possible."

Flood losses, which caused the greatest damage to the offices and homes of these physicians, are not covered by insurance.

"Because there are so many appeals being made to assist Betsy victims," Dr. Odom stated, "we have decided to limit ours to the medical profession. We do not plan to solicit funds from the general public."

In discussing the need to aid these physicians, Dr. Odom pointed out that two of the doctors were young men who had only been in practice a short while.

"We feel that by helping these doctors, we are not only assisting our fellow physicians, but are also helping the storm-struck communities where these physicians practiced by restoring normal medical services," Dr. Odom added.

The Louisiana State Medical Society has already made cash grants to some of the physician hurricane victims and will distribute all of the proceeds of the Betsy Fund as quickly as possible.

All physicians are invited to contribute to the Louisiana State Medical Society Betsy Fund. Checks should be made to the Louisiana State Medical Society Betsy Fund, Room 1528, 1430 Tulane Ave., New Orleans, La. 70112.

As of April, 1965, the Food and Drug Administration, Bureau of Medicine—which supervises the drug industry—employed 96 physicians, 23 veterinarians, 61 chemists and food and drug officers, 12 other professionals, and 155 clerks and caretakers. The bureau hopes to add 268 employees this fiscal year.

Bulletin Board

Coming Meetings

Watts Hospital Symposium—Watts Hospital, Durham, February 16, 1966.

North Carolina Mental Health Association, Annual Meeting—Queen Charlotte Hotel, Charlotte, March 3-4, 1966.

North Carolina Heart Association, 17th Annual Meeting—Jack Tar Hotel, Durham, May 18-19, 1966.

American College of Physicians, Postgraduate Course in Neurology for the Internist—Hotel Robert E. Lee, Winston-Salem, June 16-17, 1966.

Tri-State Medical Association, Annual Meeting—Carolinian Hotel, Nags Head, June 17-18, 1966.

New Hanover County Medical Symposium—Blockade Runner Hotel, Wrightsville Beach, August 12-13.

Gill Memorial Eye, Ear and Throat Hospital, 39th Annual Spring Congress in Ophthalmology and Otolaryngology—Roanoke, Virginia, April 4-8.

American Medical Association, Third Congress on Environmental Health Problems—Drake Hotel, Chicago, April 4-5.

New Members of the State Society

Drs. Zebulon Weaver, III, I, 46 Baird St., Asheville; Robert Albanese, Main St., Columbia, NC 27925; Lawrence John Clowry, Jr., Path, Charlotte Memorial Hospital, Charlotte; Murphy Furman Townsend, Jr., I, 1012 Kings Dr., Charlotte, NC 28207; Alfred Wilson Hamer, Jr., ObG, 317 N. Green St., Morganton; Joseph Sampson Colson, GP, 809 Raleigh St., Oxford; William John Reeves, Path, Bowman Gray School of Medicine, Winston-Salem; Andrew Arthur Best, GP, 412 Cadillac St., Greenville; Charles Spurgeon Durden, S, 303 Leak St., Rockingham.

News Notes from the Duke University Medical Center

The American Academy of Orthopaedic Surgeons in conjunction with the Duke University School of Medicine is sponsoring an outstanding Postgraduate Cruise Course on Fractures and other injuries, scheduled for embarkation from New York on the M S EUROPA, Monday, March 14.

A distinguished roster of teachers and lecturers will discuss the management of virtually all types of fractures and their attendant complication including, among others, major tendon disruption other than the hand and foot; plastic surgery of the extremities, surgical implication of hyperbaric oxygenation, subarachnoid hemor-



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rhage, soft tissue injuries in athletes, amputations, low back injuries and the disc syndrome, head and facial injuries, and metabolic response to injuries.

Authorities in orthopaedics and other surgical specialties coming from outside North Carolina to serve as instructors in the course will be Drs. Sam W. Banks, Clinton Compere, John J. Fahey, and Harold Sofield, all of Northwestern Medical School; William Bickel of the Mayo Foundation—Graduate School, University of Minnesota and the Mayo Clinic; William Blount, Marquette University Medical School; Truman Blocker, University of Texas, Medical Branch; Harold Boyd, University of Tennessee Medical School; Joseph Boyes, University of Southern California School of Medicine; and Fred C. Reynolds, Washington University School of Medicine.

Also distinguished in their respective fields of surgery and medicine are the following course instructors from the Duke Medical School faculty:

Drs. Lenox D. Baker, professor and chairman of the Department of Orthopaedic Surgery; Ivan Brown, professor of surgery; William M. Nicholson, professor of medicine and dean for postgraduate education; and Barnes Woodhall, professor of neurosurgery and vice-provost of Duke University School of Medicine.

The tentative itinerary of the cruise includes visits to the islands of San Juan, St. Thomas, Martinique, St. Lucia, Barbados, and Antigua. The return to New York is scheduled for 8 a.m. on Saturday, March 26.

Sole agents for the cruise are Allen Travel Service, 565 Fifth Avenue, New York, N. Y. 10017.

* * *

One of North Carolina's pioneers in the treatment of diseases of children was honored recently with the awarding of the first J. Buren Sidbury Professorship in Pediatrics. It went to Dr. Jerome S. Harris, professor and chairman of the Department of Pediatrics at the Duke Medical Center.

The new professorship, created from an endowment by Dr. Sidbury, has been set up by the Duke trustees as a tribute to the Wilmington pediatrician who founded Babies Hospital and the Babies Hospital Research Center at Wrightsville Sound.

The 79-year-old physician has practiced medicine in Wilmington for 50 years and is considered one of the pioneer pediatricians of the Southern region. He also served as a Duke trustee for 16 years before his retirement from the board in 1963.

According to Dr. William G. Anlyan, dean of the Duke Medical School, Dr. Sidbury was instrumental in introducing newer methods of infant feeding, immunizations and pediatric management. He also played a significant role in educating the public and profession in many principles of pediatrics.

The distinguished professorship will be conferred on Dr. Harris by Dr. Douglas M. Knight, Duke president.

A native of New York City, Dr. Harris joined the Duke faculty in 1937 and holds appointments in both pediatrics and biochemistry. He has conducted extensive research in metabolic diseases of children and in pediatric cardiology. Presently he is a member of the Human Embryology and Developmental Study Section of the National Institutes of Health.

News Notes from the Bowman Gray School of Medicine of Wake Forest College

Dr. Robert P. Morehead, professor and chairman of the Department of Pathology at the Bowman Gray School of Medicine is the author of the largest and perhaps the most complete textbook of pathology ever published.

The book, "Human Pathology: An Introduction to Medicine," was released Sept. 23 by the Blakiston Division of McGraw-Hill Book Company. It contains 1,700 pages (300 more than the next largest pathology textbook) and more than 3,000 illustrations (twice the number included in any previous pathology work). It will sell for $23.50 per copy.

Dr. Morehead's book provides for the medical student, the house officer and the practicing physician a logical and progressive plan for learning, one which allows for the ready storage, retrieval, and utilization of knowledge about disease.

Following a basic outline, which Dr. Morehead developed 10 years ago to make the study of pathology easier for students, the book is divided into three parts. Part one (Pathology as a Basic Medical Science) and part two (Pathology as a Clinical Science) are correlated and cross-referenced. Part three deals with the role of the pathologist in research.

Not only does the author cover the majority of disease entities but he also has included in his book several chapters which are unique in pathology textbooks.

The book also presents for the first time Dr. Morehead's findings on a new classification of tumors. Through extensive studies of the general pathology of tumors, he has obtained evidence of a biologically distinct group of tumors, which he calls "intermediate tumors." Formerly tumors were classified either as malignant or benign.

* * *

Dr. Frank R. Lock, professor and chairman of the Department of Obstetrics and Gynecology, is the new president of the American Association

WHEN MOTHER'S IRON ISN'T UP TO MOTHERHOOD

IN BRIEF: **ACTIONS AND USES:** A single dose of Imferon (iron dextran injection) will measurably begin to raise hemoglobin and a complete course of therapy will effectively rebuild iron reserves. The drug is indicated only for specifically-diagnosed cases of iron deficiency anemia and then only when oral administration of iron is ineffective or impractical. Such iron deficiency anemia may include: patients in the last trimester of pregnancy; patients with gastrointestinal disease or those recovering from gastrointestinal surgery; patients with chronic bleeding with continual and extensive iron losses not rapidly replenishable with oral iron; patients intolerant of blood transfusion *as a source of iron;* infants with hypochromic anemia; patients who cannot be relied upon to take oral iron.

COMPOSITION: Imferon (iron dextran injection) is a well-tolerated solution of iron dextran complex providing an equivalent of 50 mg. of elemental iron in each cc. The solution contains 0.9% sodium chloride and has a pH of 5.2-6.0. The 10 cc. vial contains 0.5% phenol as a preservative.

ADMINISTRATION AND DOSAGE: Dosage, based upon body weight and Gm. Hb./100 cc. of blood, ranges from 0.5 cc. in infants to 5.0 cc. in adults, daily, every other day, or weekly. The total iron requirement for the individual patient is readily obtainable from the dosage chart in the package insert. Deep intramuscular injection in the upper outer quadrant of the buttock, using a Z-track technique, (with displacement of the skin laterally prior to injection), insures absorption and will help avoid staining of the skin. A 2-inch needle is recommended for the adult of average size.

SIDE EFFECTS: Local and systemic side effects are few. Staining of the skin may occur. Excessive dosage, beyond the calculated need, may cause hemosiderosis. Although allergic or anaphylactoid reactions are not common, occasional severe reactions have been observed, including three fatal reactions which may have been due to Imferon (iron dextran injection). Urticaria, arthralgia, lymphadenopathy, nausea, headache, and fever have occasionally been reported. Initial test doses of 0.5 cc. are advisable.

PRECAUTIONS: If sensitivity to test doses is manifested, the drug should not be given. Imferon (iron dextran injection) must be administered by deep intramuscular injection only. Inject only in the upper outer quadrant of the buttock, not in the arm or other exposed area.

CONTRAINDICATIONS: Imferon (iron dextran injection) is contraindicated in patients sensitive to iron dextran complex. Since its use is intended for the treatment of iron deficiency anemia only, it is contraindicated in other anemias.

CARCINOGENICITY POTENTIAL: Using relatively massive doses, Imferon (iron dextran injection) has been shown to produce sarcoma in rats, mice and rabbits and possibly in hamsters, but not in guinea pigs. The risk of carcinogenesis, if any in man, following recommended therapy with Imferon (iron dextran injection) appears to be extremely small.

SUPPLIED: 2 cc. ampuls, boxes of 10; 5 cc. ampuls, boxes of 4; 10 cc. multiple dose vials.

in iron deficiency anemia for rapid and predictable replacement of iron reserves

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(iron dextran injection)



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of Obstetricians and Gynecologists. Installation ceremonies took place Sept. 11 at the Seventy-sixth annual meeting of the association in Hot Springs, Va.

Dr. Lock, who was elected president-elect of the organization in 1964, succeeded Dr. Ralph Reis, professor of obstetrics and gynecology at Northwestern University School of Medicine, as president.

A former secretary of the American Association of Obstetricians and Gynecologists, Dr. Lock is the immediate past president of the American College of Obstetricians and Gynecologists.

* * *

Researchers at the Bowman Gray School of Medicine have detected a biochemical abnormality in a high percentage of mongoloid children they have studied.

Their work indicates a link between the metabolism of taurine and mongolism. Furthermore, they have found a relationship between taurine excretion levels and mentality levels in mongoloids.

Dr. J. Stanton King, research associate professor of urology (biochemistry) at the medical school, reported the findings at the 1965 Technicon Symposium in New York City.

The Bowman Gray research team, which includes Dr. Harold O. Goodman, associate professor of medical genetics; Dr. James J. Thomas, instructor in clinical pediatrics; and Dr. Arthur Wainer, assistant professor of biochemistry, have studied the biochemical aspects of mongolism for the past 15 months.

In a study of 140 mongoloids and 100 non-mongoloids, they have found that the urinary excretion of taurine by the mongoloids in the study was significantly less than that of normal controls. More than half the mongoloids excrete taurine below the lowest level observed among normal subjects.

They further found that there is a definite relationship between taurine excretion and I. Q. in the mongoloid. On the average, the lower the taurine excretion level of the mongoloid, the lower was his I. Q.

The researchers emphasize that the abnormal metabolism of taurine is only one of several factors which may account for the mental retardation observed in mongolism.

Since mongolism is the most frequent disease produced by chromosomal error, it is believed that the difference in the mongoloid's handling of taurine is a genetically controlled condition and probably can be attributed to an "overdose" effect created by his extra chromosome.

* * *

Dr. William H. Boyce, professor of urology at the Bowman Gray School of Medicine, was program chairman for an International Symposium on Renal Neoplasia Sept. 12-15 in Brasilia, Brazil. The symposium was sponsored jointly by the National Academy of Sciences and the Bowman Gray School of Medicine. Dr. J. Stanton King, research associate professor of urology, is editor of the symposium proceedings.

* * *

Dr. Richard L. Burt, professor of obstetrics and gynecology, has been appointed associate examiner for the American Board of Obstetrics and Gynecology.

* * *

Dr. J. Maxwell Little, professor and chairman of the Department of Pharmacology, was recently named chairman of the Research Committee of the North Carolina Heart Association.

* * *

Dr. Richard G. Weaver, associate professor of ophthalmology, was elected secretary-treasurer of the North Carolina Society of Ophthalmology and Otolaryngology.

* * *

Dr. Norman M. Sulkin, professor and chairman of the Department of Anatomy, received a recent appointment to the Committee on Animal Research in Geriatrics of the National Academy of Sciences' National Research Council.

* * *

Dr. Howard H. Bradshaw, professor and chairman of the Department of Surgery, was the principal speaker at a "Dr. H. H. Bradshaw Day," held annually in his honor by the Academy of General Practitioners in Johnson City, Tenn. He spoke on "Portal Hypertension" at the Sept. 16 meeting.

* * *

Dr. A. Sherrill Hudspeth, assistant professor of surgery, presented a paper on "Cardiovascular Responses to Induced Hypervolemia" at a meeting of the International Cardiovascular Society Sept. 16 in Philadelphia, Pa.

* * *

Dr. I. Meschan, professor and chairman of the Department of Radiology, participated in a meeting of the American Roentgen Ray Society Sept. 28 in Washington, D. C. He presented a paper on "Simultaneous PAH, Inulin and Renografin-131-I Renal Clearance Determinations and a Method for Calculating Renografin Clearance from Renograms of Patients."

* * *

Dr. Charles C. Middleton, assistant professor of Laboratory Animal Medicine, was a lecturer for a Conference on Pathology of Diseases of Laboratory Animals Sept. 20-24 at the Armed Forces Institute of Pathology, Washington, D. C. He spoke on "Spontaneous Lesions in Squirrel Monkeys."

* * *

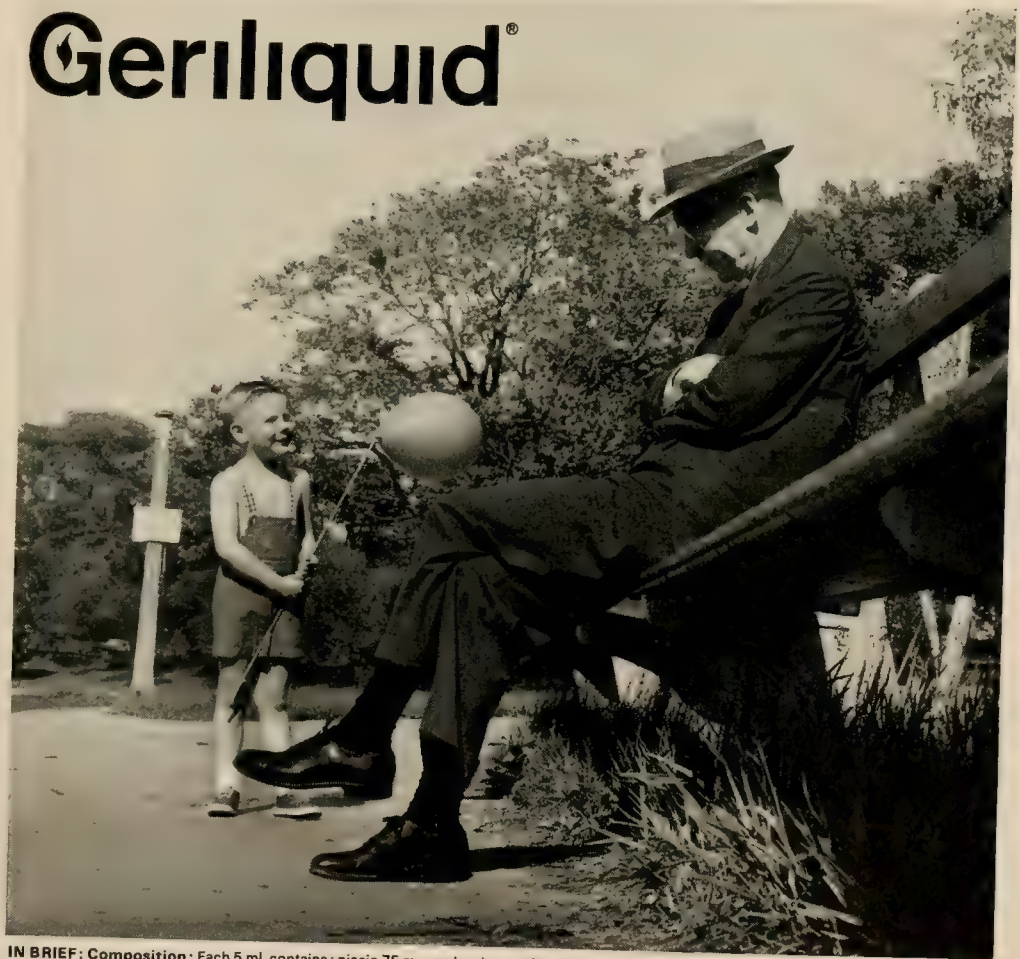
Dr. Emery C. Miller Jr., associate professor of medicine, served as a member of the visiting faculty for the thirteenth annual Diabetes Seminar Sept. 30-Oct. 1 in Jacksonville, Fla. He spoke on "The Pituitary" during a session on

when even southern sun fails to warm cold hands and feet

provide rapid, sustained vasodilation for warmth and relief of pain, dizziness and faintness in patients with impaired peripheral circulation

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IN BRIEF: Composition: Each 5 ml. contains: niacin 75 mg. and aminoacetic acid (glycine) 750 mg. in a palatable sherry wine base; alcohol 5%.
Side Effects: Occasional lightheadedness or transient itching which may disappear with continued use. There are no known contraindications; however, caution is advised when there is concomitant administration of a coronary vasodilator.
Administration and Dosage: One or two teaspoonfuls 3 times a day before meals. If flushing is objectionable, dosage may be lowered. However, tolerance to flushing usually develops without loss of efficacy in regard to vasodilation.
Supplied: Bottles of 8 oz. and 16 oz.

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"The Endocrines and Diabetes" and lectured on "Retinopathy" during a session on "Diabetes and Its Complications."

* * *

Two members of the Bowman Gray faculty presented papers at the 150th meeting of the American Chemical Society Sept. 13-17 in Atlantic City, N. J. Dr. Frank H. Hulcher, assistant professor of biochemistry, spoke on "A Pteridine-Conjugated Peptide from Pseudomonas SP." Dr. Daniel N. Moury, instructor in biochemistry, spoke on "Factors Affecting the Demonstration of Electron Transfer Particle-Like Activities in the Microsomal Fraction of Rat Liver."

* * *

Dr. R. Winston Roberts, professor of ophthalmology, spoke on "Diagnosis of Glaucoma" and "Handling of Glaucoma" at a Sept. 11 meeting of the Fort Worth Ophthalmology Society, Fort Worth, Texas.

* * *

Dr. James F. Toole, professor and chairman of the Department of Neurology, presented the George E. Brown Memorial Lecture Oct. 16 at the annual meeting of the American Heart Association in Bal Harbour, Fla. He spoke on "Inter-Arterial Shunts in the Cerebral Circulation."

* * *

Dr. Clark E. Vincent, professor of sociology, participated in a Conference on Public Family Planning Clinics Sept. 9-10 in New York City. He spoke on "The Client—Faces and Facts."

* * *

Dr. Arthur Wainer, assistant professor of biochemistry, presented a paper on "The Use of Cysteic Acid as an Internal Standard in Amino Acid Analysis" at the 1965 Technicon Symposium Sept. 8-10 in New York City.

News Notes from the University of North Carolina School of Medicine

North Carolina Memorial Hospital has been fully accredited again by the Joint Commission on Accreditation of Hospitals.

E. B. Crawford, Jr., director of the hospital on the campus of the University of North Carolina, said that the new accreditation is for a full three-year period. Three years is the maximum period before another survey is necessary.

JCAH is comprised of four national organizations—the American College of Physicians, the American College of Surgeons, the American Hospital Association, and the American Medical Association.

Its accreditation program is entirely voluntary. When a hospital desires national accreditation, it asks JCAH to make a personal survey and compare its activities with a set of national standards.

In addition to setting standards for the hospital building, equipment, staff and administration, the accrediting commission required certain other procedures to insure high quality care for patients.

* * *

A high-energy betatron—the most advanced radiation weapon against cancer—will be installed at North Carolina Memorial Hospital when space is available in a new ambulatory outpatient wing.

The 1965 General Assembly appropriated $387,489 to the University of North Carolina to purchase modern equipment for treating cancer patients.

Most of the funds—about 90 percent—will be used for two pieces of supervoltage radiotherapy equipment: a 40 million electron volt betatron unit, the second or third of its size for medical use in the U. S.; and a cobalt unit, the most widely used "workhorse" in the X-ray treatment of cancers in the U. S.

Dr. F. D. Pepper, Jr., a radiologist at North Carolina Memorial Hospital and a member of the U.N.C. medical faculty, said that installation of the high-voltage radiation equipment will mean that the hospital will be able to provide X-ray treatment for cancer patients comparable to any medical center in the world.

The new ambulatory outpatient wing will provide space for a completely new physical setup for the Radiotherapy Division. Construction of the wing is scheduled to begin later this year and be completed by late 1968.

* * *

Six of every seven of the new medical students registering at the University of North Carolina School of Medicine this year are residents of the state. In a first-year class of 70 students, only 11 are out-of-staters—and they represent nine different states.

The 70 first-year students were selected from more than 500 applicants. Of those selected, three are women.

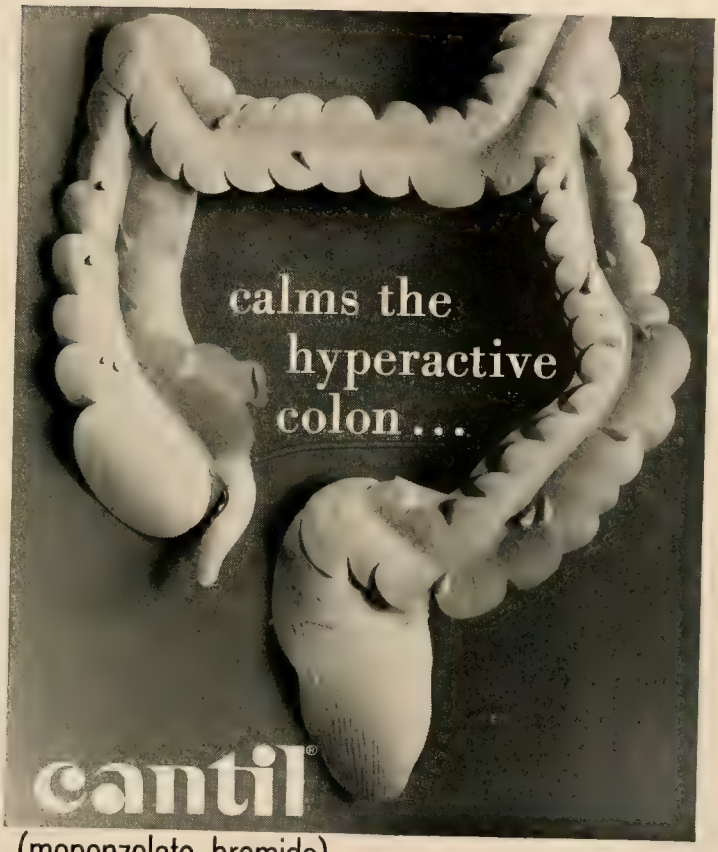
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Eight medical students at the University of North Carolina School of Medicine have been named recipients of scholarships for outstanding academic achievements.

The Walter Reece Berryhill Scholarship, awarded for the first time this year, was presented to Robert English Sevier of Asheville, a rising senior. The award was established by the U.N.C. Medical Parents Club in honor of Dr. W. Reece Berryhill, former dean of the medical school for 23 years and now engaged in teaching and research at the school.

The H. McLeod Riggins Scholarship, in honor of Dr. H. McLeod Riggins of New York City, was awarded to Gerald Wayne Blake, a rising junior from Jacksonville.

Six Alumni Merit Scholarships, awarded each year to two students from each of the rising



(mepenzolate bromide)

helps restore normal motility and tone

Cantil (mepenzolate bromide) works in the colon. In irritable colon, spastic colon, ulcerative colitis and other functional and organic colonic disorders, it acts to:

- control diarrhea/constipation
- relieve spasm, cramping, bloating
- make patients more comfortable

with little effect on stomach, bladder or other viscera.

"In 40 of 44 cases of irritable or spastic colon, Cantil [mepenzolate bromide] or Cantil with Phenobarbital reduced or abolished abdominal pain, diarrhea and distention and promoted restoration of normal bowel function . . . Cantil [mepenzolate bromide] proved to be singularly free of anticholinergic side-effects. Blurring of vision or dryness of the mouth were occasionally seen and were usually managed with a reduction in dosage. Urinary retention, noted in two cases was eliminated in one by reducing dosage."[1]

IN BRIEF:

One or two tablets three times a day and one or two at bedtime usually provide prompt relief. Cantil with Phenobarbital may be prescribed if sedation is required.

Dryness of the mouth or blurring of vision may occur but it is usually mild and transitory. Urinary retention is rare. Caution should be observed in prostatic hypertrophy—withhold in glaucoma. Cantil with Phenobarbital is contraindicated in patients sensitive to phenobarbital.

Supplied: CANTIL (mepenzolate bromide)—25 mg. per scored tablet. Bottles of 100 and 250.

CANTIL with PHENOBARBITAL—containing in each scored tablet 16 mg. phenobarbital (warning: may be habit forming) and 25 mg. mepenzolate bromide. Bottles of 100 and 250.

1-Riese, J.A.: Amer. J. Gastroent. 28:541 (Nov.) 1957

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senior, junior and sophomore classes, were presented to the following: rising seniors, Hugh Alexander McAllister, Jr., of Lumberton and William Hunter Vaughan of Tryon; rising juniors, Barbara Jean Parks of Route 6, Lexington, and Jerry Lee Norton of Lake Toxaway; rising sophmores, Patrick Thomas Malone of Durham and Thomas Ladd Henley of New York City.

* * *

Specialized and fragmented services are preventing the handicapped child in the "typical" community from getting the kind of health care he really needs.

This is a major conclusion reached by a UNC research team in the final report of a study begun in 1961 in Alamance County, which was financed by the Nemours Foundation of Wilmington, Delaware.

The researchers were forcibly impressed by "the lack of systematic, continuous communication and referral between health agents and agencies and the fact that no one agency was in a position to provide a measure of coordination among the diverse agencies and services involved."

Dr. William J. Richardson, assistant dean of the UNC School of Medicine and the medical director for the study team, reported: "There are many excellent programs and services (for handicapped children), but they are directed at specific diagnoses rather than at the child who happens to have a condition needing care. And they follow the biblical injunction, 'Let not your right hand know what your left hand doeth'."

The study report made it clear that its findings probably would apply to most communities although the study was conducted in Alamance.

Participating in the 157-page medical and sociological report of how handicapped children are treated in Alamance were Dr. Richardson, Dr. A. C. Higgins, formerly of the UNC Institute of Research in Social Science, and Richard G. Ames, UNC sociology instructor.

* * *

A cherished belief that your heart beats faster when you anticipate an exciting, painful, or frightening experience was challenged by a UNC psychologist in a report to an international meeting of research scientists in Czechoslovakia recently.

Dr. Paul A. Obrist, a member of the medical faculty in the Department of Psychiatry, told the International Colloquium on the Orienting Reflex that his experiments indicate that the human heart seems to slow down in anticipation of many changes in the environment.

Using electrical shocks, mental tasks, and other emotional stimuli, he has found that most people have a slower heart beat while anticipating changes. The expected speed-up in the heart beat occurs at the time of actual pain, fright or other change.

A two-day symposium on Sodium Transport by the Kidneys held at the UNC School of Medicine in October attracted about 50 specialists from leading medical centers in the United States and abroad.

Three UNC investigators of the American Heart Association were among the speakers. They were Dr. Carl W. Gottschalk, Dr. William E. Lassiter, and Dr. Paul P. Leyssac.

Dr. Leyssac is a visiting scientist at UNC this year, on leave from the Institute of Experimental Medicine at the University of Copenhagen in Denmark.

* * *

Educational programs were made available to about 90% of North Carolina physicians when the UNC School of Medicine resumed its weekly two-way radio medical conferences in October.

The conference schedule has been expanded from one to two days each week and the number of medical groups in the listening audience has increased from 15 last year to 20 this year.

Dr. Oscar L. Sapp, director of the radio programs and a member of the UNC medical faculty, said that the faculty pool for the broadcasts is being enlarged this year to include speakers from Duke University Medical Center and Bowman Gray School of Medicine.

Broadcasts are originated here by WUNC-FM and relayed to Piedmont and Western North Carolina physicians on Tuesdays by WSJS-FM in Winston-Salem, WLOS-FM in Asheville, and WGWR-FM in Asheboro. Programs are carried into Eastern North Carolina on Thursdays by WVOT-FM in Wilson and WITN-FM in Washington.

Part of the financial support of the programs is from a grant-in-aid from MERCK SHARP and DOHME.

North Carolina Initiates in American College of Surgeons

Approximately 1,175 surgeons were inducted as new fellows of the American College of Surgeons in cap-and-gown ceremonies during the annual five-day Clinical Congress of the world's largest organization of surgeons held in Atlantic City recently.

Fellowship, a degree entitling the recipient to the designation "F.A.C.S." following his name, is awarded to those surgeons who fulfill comprehensive requirements of acceptable medical education and advanced training as specialists in one or another of the branches of surgery, and who give evidence of good moral character and ethical practice.

Among those receiving this distinction at the 1965 convocation were the following North Carolina surgeons:

Drs. Harold B. Bates and Joseph J. Lindley, Burlington; Drs. C. Hal Chaplin, F. Wayne Lee, and David S. Nightingale, Charlotte; Drs. Neel H. Bronnenberg and Hugo L. Deaton, Hickory; Dr. Dexter T. Witherington, Kingston; Dr. Jack E. Dunlap, Lumberton; Drs. James N. Blackerby and Dale T. Millns, New Bern; Dr. Powell G. Fox, Jr., Raleigh; Dr. William H. Weinel, Jr., Wilmington; Drs. Huitt E. Mattox, Jr., and Robert W. Youngblood, Wilson; and Dr. James E. Robinson, Winston-Salem.

Wrightsville Marine Bio-Medical Laboratory

A radically different type of medical research center, established in Wilmington recently, will focus on cellular metabolism, "the most distressing problem in pediatrics."

Thought to be the first of its type in existence, the new facility is a joint effort of North Carolina's three universities and medical schools and an existing research center.

It will be known as Wrightsville Marine Biomedical Laboratory of Babies' Hospital Research Center, Inc.

A Scientific Council with members from Duke University, the University of North Carolina, Wake Forest College, and the Research Center's board of trustees met in Wilmington for the formal signing.

The official body named Dr. George Padilla acting head of the Laboratory for one year. Dr. Padilla is an assistant professor of physiology at Duke University School of Medicine.

Using marine life as laboratory specimens, scientists studying at the new unit will specialize in pediatric research by seeking a better understanding of the cellular structure of simple sea animals.

While the new laboratory was in the planning stages, Dr. Weston M. Kelsey was among those who underscored the importance of cellular biology as the new frontier in pediatric research.

"Most of the congenital defects, our most distressing problem at the moment in pediatrics, arise from errors in cellular metabolism," the Bowman Gray School of Medicine pediatrician said.

The new research "quadrangle" will be located in the parent institution, Babies' Hospital Research Center, Inc., on Wrightsville Sound.

News Notes

Dr. Reeve H. Betts of Boston and the VA Hospital at Oteen was elected recently by the Methodist Board of Missions as medical secretary in the World Division of the board, succeeding the late Dr. Harold N. Brewster.

Dr. Betts will have responsibility for 152 Methodist medical institutions including 39 hospitals, 80 clinics and dispensaries, and various other projects. In addition to working with doctors and nurses in all phases of medical mission work and in the training of indigenous medical personnel, he will be responsible for the medical care of 1,475 Methodist missionaries overseas.

* * *

J. C. Cowan, Jr., of Greensboro, vice chairman of the Board of Directors of Burlington Industries, has been elected to the Board of Hospital Care Association at Durham.

Cowan has long been active in state and local health programs. Currently he is vice president of the North Carolina Medical Foundation and a member of the Governor's Council for Occupational Health.

* * *

Dr. John G. Smith of Rocky Mount received one of three American Heart Association's Gold Heart awards presented at the forty-first annual meeting of the Association held at Bal Harbour, Fla., in October.

More than one hundred North Carolina physicians participated in the scientific sessions of the Association.

President Paschal Warns Against Dropping Voluntary Health Insurance

The President of the State Medical Society recently cautioned persons over 65 years of age against abandoning or reducing any existing hospital or health insurance plan they may have in effect solely on the prospect of immediate assistance under the so-called "medicare" legislation recently enacted by Congress and signed into law by the President.

Dr. George W. Paschal, Jr. of Raleigh, President of the Medical Society of the State of North Carolina, pointed out that the government's hospital and medical plan for the non-assisted aged under the Social Security system will not provide any benefits until July 1, 1966, at the earliest.

Dr. Paschal urged the thousands of North Carolinians age 65 and older who are currently enrolled in voluntary health insurance plans to make certain they maintain their coverage under such programs which provide them with broad protection against the larger costs of needed health services, certainly until the benefits available under the government's program become definitely established.

Even after the government program is established, he said, it would be most advisable for people age 65 years and older not to discontinue their voluntary health insurance policies unless and until they have compared carefully the broad coverage, deductible implications, and minimal restrictions guaranteed by these policies with the narrow coverage and complex administrative rules and regulations of the government's plans.



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To determine the relative efficacy of thiazide diuretics in congestive heart failure, Metahydrin (trichlormethiazide) and three other thiazides were measured against Mercuhydrin® (meralluride injection)—the standard diuretic. "The results leave little doubt that the diuretic efficacy, that is, the 'ceiling effect' in these terms, is not the same for different thiazides."* The assays ranged from about 40% of the effectiveness of Mercuhydrin through 67%, 77% to 90% for Metahydrin. The latter two values were thought to be significantly different from the lowest value and to be therapeutically important.

*Gold, H., *et al*: Closed Panel Conference: Present Status of the Management of Congestive Failure and Advances in Diuretic Therapy, Journal of New Drugs, 1:177, July-August, 1961.

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IN BRIEF: ADMINISTRATION AND DOSAGE: One 2 mg. or 4 mg. tablet once or twice daily. In acute, severe decompensation, Mercuhydrin® (meralluride injection) may be necessary initially.

PRECAUTIONS: As with all effective diuretics, vigorous therapy may produce electrolyte depletion. Patients with severely reduced renal function should be observed carefully since thiazides may be contraindicated. Care should be taken with patients predisposed to diabetes or gout. Patients with a tendency to potassium deficiency, as in hepatic cirrhosis or diarrheal syndromes, or those under therapy with digitalis, ACTH, or certain adrenal steroids, also should be watched carefully.

SIDE EFFECTS: Nausea, flushing, constipation, skin rash, muscle cramps and gastric discomfort have been occasionally noted; rarely thrombocytopenia and bone marrow depression, photosensitivity, cholestatic jaundice, pancreatitis, perimacular edema, gout and diabetes have been caused by administration of thiazides.

CONTRAINDICATIONS: Complete renal shutdown; rising azotemia or development of hyperkalemia or acidosis in severe renal disease; demonstrated hypersensitivity.

HOW SUPPLIED: Bottles of 100 and 1000 tablets.

The Month in Washington

President Johnson has signed into law a modified version of the controversial, so-called DeBakey legislation authorizing establishment of regional cooperative programs of research, training, and related patient care in the fields of heart disease, cancer, stroke, and related diseases.

A total of $340 million in federal funds will be available during the next three years to help universities, medical schools, research centers, and other public or non-profit institutions such as hospitals, and agencies in (1) planning, (2) conducting feasibility studies, and (c) operating pilot projects.

The legislation was amended in the House, as recommended by the American Medical Association, to make it less objectionable to the medical profession. Dr. James Z. Appel, president of AMA, said the some 20 House amendments were substantial and should "allay many of the fears the medical profession had about the original bill."

But even so, the AMA could not support the amended legislation, Dr. Appel said, "because we believe it still introduces an undesirable concept."

The original bill called for establishment of regional medical complexes and would have included "other major diseases."

As enacted into law, the programs are to be carried out "in cooperation with practicing physicians." Patient care is limited to that "incident to research, training or demonstrations." No patient can receive such treatment except on referral of a practicing physician.

Construction is limited to remodeling and renovation of buildings and replacement of obsolete equipment.

The Surgeon General of the Public Health Service is designated as the official responsible for final approval of federal grants under the program. However, he can act only upon the recommendation of a national advisory council. And an application for a federal grant first must be approved by a local advisory committee. Both the national and local committees must include practicing physicians.

Present federal plans call for starting eight regional programs during the first year and 17 more during the next two years. As of this writing, none of them had been announced.

* * *

The Department of Health, Education, and Welfare has ruled that physicians are not required to sign racial non-discrimination pledges in order to receive payment for treating federal-state welfare patients.

The ruling followed protests of some state medical societies and individual physicians when some state health departments interpreted the new Civil Rights Act as requiring the signing of such a pledge. The societies and physicians protested that such a pledge would constitute an unnecessary federal interference in the patient-physician relationship.

The recent special meeting of the AMA House of Delegates adopted a resolution pointing out that non-discrimination conditions under the Principles of Medical Ethics and "willingly self-imposed by the medical profession far exceed any pledge of this nature demanded by a federal bureaucracy."

* * *

The House Ways and Means Committee has postponed until next year consideration of legislation that would liberalize the so-called Keogh law. The present law permits physicians and other self-employed persons to defer income taxes on a maximum of $1,250 a year set aside in a retirement fund. A bill before the committee would increase the maximum to $2,500 a year.

* * *

The Public Health Service reported only 35 cases of polio during the first 34 weeks of this year, a record low for the period. For the same period last year, 65 cases were reported.

During the same period this year, only 96 cases of diphtheria were reported. This figure compared with a five-year median of 244 cases in the same number of weeks.

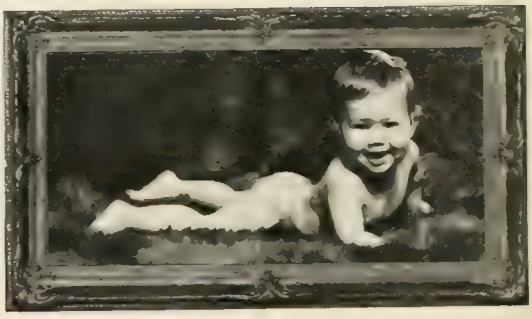
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1—Pomeranze, J., and Gadek, R.J.: Am. Pract. & Digest Treat. *8*:73-77 (Jan.) 1957
2—Asher, L.M.: Am. J. Digestive Diseases *4*:272 (Apr.) 1959

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lic Health Service career officer, is the new PHS Surgeon General.

He succeeded Dr. Luther Terry who resigned to become vice president of the University of Pennsylvania.

Recognized as an expert in the field of public health administration, Dr. Stewart had headed the National Heart Institute since last August. For the previous two years, he served as assistant to the special assistant to the HEW Assistant Secretary for Health and Medical Affairs.

* * *

A total of 1,529 physicians will be drafted during the first part of next year. The military needs in Viet Nam made necessary an increase in the doctors' draft over the 852 called last January and the 1,000 in January, 1964.

The 1966 draft will cover physicians who completed their internships from two to five years ago, many of whom now are in private practice.

All those drafted will be given an opportunity to accept officer commissions before induction.

Of the quota, 949 will be for the Army, 266 for the Navy and 320 for the Air Force.

In addition to the physicians, 350 dentists and 100 veterinarians will be drafted.

* * *

The Surgeon General's Advisory Committee on Immunization has recommended community vaccination programs against measles.

The committee said that measles is one of the most important causes of serious illness in children and recommended that continuing "maintenance" programs aimed at vaccinating children about one year of age be established in all communities.

"Additionally, consideration should be given to the concept of full immunization of all children entering schools, nursery schools, etc., since measles transmission in the community occurs principally among children in such settings," the committee said.

"Widespread immunization may be achieved through routine and intensive programs conducted in physicians' offices and immunization clinics in both public health and private medical practice. In some instances, mass community-wide vaccination programs may prove practicable in communitties or segments of communities in which immunization levels achieved through routine practice are known to be low.

"If community-wide programs are conducted, cognizance must be taken of the fact that such programs are necessarily more complex than those involving oral polio vaccine, for example, since measles vaccines must be parenterally administered."

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NORTH CAROLINA

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Flexner Report in North Carolina

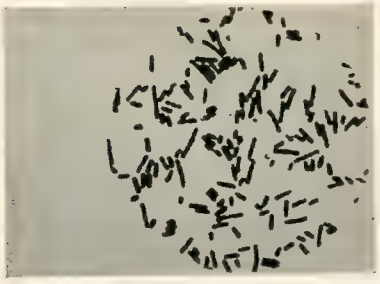
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NORTH CAROLINA MEDICAL JOURNAL

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VOLUME 26 DECEMBER, 1965 NUMBER 12

The Effect of the Flexner Report on North Carolina Medical Schools

VAN B. NOAH

WINSTON-SALEM

Abraham Flexner, born in 1866 on Kentucky soil, was one of the well-known educators of his time. Educated at Johns Hopkins University, he was destined to apply his knowledge of the liberal arts to many facets of both American and European societies. His activities included teaching as well as research. He was a very radical critic, especially of the "American college."

Living in an era of American society that lacked a strong educational component but which possessed major prerequisites for its development, Flexner found himself instrumental in tying together three strong factions. First, there were the statesmen of higher education, including such famous men as Gilman of Johns Hopkins, Eliot of Harvard, Butler of Columbia, and Harper of Chicago. The second faction consisted of the contemporary leaders of medicine, the best known of these being Doctors Welch, Osler, Cushing, Loeb, and Simon Flexner, Abraham's bacteriologist brother. The last faction was made up of the newly emerging giant foundations, principally the Rockefeller, Carnegie, and Rosenwald. It was Flexner who was responsible for the establishment of the Institute of Advanced Study at Princeton University in 1930.

It is perhaps unfortunate that Mr. Flexner favored so strongly the "more distinguished schools" of that day, especially Johns Hopkins, Harvard, and Princeton, and that he set these institutions as a standard goal of achievement for other schools. Despite his restricted standards of excellence, he made some of the most significant contributions toward the maturation of American education. Nowhere was his influence to be felt by American society so strongly as when it was directed toward the medical profession in the form of what today is known as the "Flexner Report."

Abraham Flexner is sometimes confused with his brother, Simon, who was one of the foremost physicians of his day. Simon Flexner was a noted bacteriologist who made significant contributions to the knowledge of venoms, epidemic meningitis, and poliomyelitis. He was professor of pathology at the University of Pennsylvania and was the first director of the Rockefeller Institute of Medical Research.

For editorial comment see page 560

Just how did Mr. Flexner, a man who knew little of medicine, manage to get his foot into the door of this profession? As it happens, he was looking for what he termed "congenial occupation," and it occurred to him that he might find it at the Carnegie Foundation for the Advancement of Teaching. Dr. Henry S. Pritchett, then president of the recently established Foundation, requested that he make a study of the medical schools in the United States and Canada. Flexner, who at that time was being depleted financially, was prepared to do anything of a "scholarly nature," and he took on this task, gladly accepting Dr. Pritchett's point of view that this study was a job for the educator and not for the practitioner[1].

Mr. Flexner began his survey at once, having in no time gained an air of qualification and confidence, as can be gathered from his own words:

> Having finished my preliminary reading, I went to Baltimore—how fortunate for me that I was a Hopkins graduate!—where I talked at length with Drs. Welch, Halsted, Mall, Abel, and Howell, and with a few others who knew what a medical school ought to be, for they had created one. I had a tremendous advantage in the fact that I became thus intimately acquainted with a small but ideal medical school embodying in a novel way, adapted to American conditions, the best features of medical education in England, France, and Germany. Without this pattern in the back of my mind, I could have accomplished little. With it I began a swift tour of medical schools in the United States and Canada—155 in number, every one of which I visited. I had no fixed method of procedure. I have never used a questionnaire. I invariably went and saw the schools and talked with teachers of medicine and the medical sciences and their students.[2]

The Need for Reform

There was without any doubt a need for reforms in American medicine. There had been in the previous twenty-five years an over-production of uneducated and ill-trained medical practitioners, this due mainly to the existence of too many commercial, or proprietary, schools and their lack of funds only with which quality instruction could be offered. And while an over-supply of medical schools existed, there was a shortage of teaching hospitals.

But even prior to the Flexner report, a revolution in medicine was already under way. One would be wrong to insist that Abraham Flexner be given full credit for this transformation. Professional unrest was already on the upswing, and any impetus directed toward the medical revolution by the Carnegie Foundation lay mainly in the fact that the Flexner Report made public the facts concerning the medical schools of the United States and Canada. But no person can dogmatically deny that the Flexner Report was not needed, for it rightfully deserves its place as one of the milestones of American medicine.

The report itself consisted of two parts, the first presenting the history of medicine in the United States and the present status of medicine at the time, and the second giving in detail a description of all the medical schools in the United States and Canada. Dr. Pritchett described the purpose of this report:

> The object of the Foundation in undertaking studies of this character is to serve a constructive purpose, not a critical one. Unless the information here brought together leads to constructive work, it will fail of its purpose. The very disappearance of many existing schools is part of the reconstructive process. Indeed, in the course of preparing the report a number of results have already come about which are of the highest interest from the constructive point of view. Several colleges, finding themselves unable to carry on a medical school upon right lines, have, frankly facing the situation, discontinued their medical departments, the result being a real gain to medical education. Elsewhere, competing medical schools which were dividing the students and the hospital facilities have united into a single school. In still other instances large sums of money have been raised to place medical education on a firmer basis.
>
> In the preparation of this report the Foundation has kept steadily in view the interests of two classes, which in the over-multiplication of medical schools have usually been forgotten, —first, the youths who are to study medicine and to become the future practitioners, and, secondly, the general public, which is to live and die under their ministrations.[3]

North Carolina's Four Medical Schools

At the time when Flexner undertook his study, the State of North Carolina possessed the services of four medical schools—the University of North Carolina Medical School at Chapel Hill, the Wake Forest College School of Medicine at Wake Forest, the North Carolina Medical College at Charlotte, and the Leonard Medical School of Shaw University (Negro) at Raleigh. Of these four schools only the North Carolina Medical College and the Leonard Medical School had a complete four-year curriculum, the other two schools offering only two years of basic medical instruction. The University of North Carolina School did, however, have the facilities of a hospital in Raleigh, which served as its clinical department for any of their students who for any reason could not attend the second two years at a four-year medical school outside the state.[4] This clinical department served a very valuable service in that it helped North Carolina retain

a larger number of the physicians trained in the state.

In February of 1909 Abraham Flexner came to North Carolina. He described the medical schools in the state with respect to the entrance requirements, the attendance, the teaching staff, the resources available for maintenance, and the laboratory facilities.

University of North Carolina

The school at Chapel Hill received a very good rating from Flexner. It was commended on its well-trained and full-time instructors, its adequate budget, its excellent laboratories, and its progress toward a good library. The department of anatomy was deemed inferior; however, Flexner described the work of the University as being intelligently planned and conducted along modern lines.

Wake Forest

The Wake Forest College School of Medicine received a Class A plus rating in method, equipment, and standards. This was the highest rating possible. The school was reported as having a good full-time teaching staff of well-trained medical men. Concerning the laboratory facilities, Mr. Flexner could not conceal his admiration as they were shown to him.[5] His report contained the following information:

> The laboratories of this little school are, as far as they go, models in their way. Everything about them indicates intelligence and earnestness. The dissecting room is clean and odorless, the bodies undergoing dissection being cared for in the most approved modern manner. Separate laboratories, properly equipped, are provided for ordinary undergraduate work in bacteriology, pathology, and histology, and the instructor has a private laboratory besides. Chemistry is taught in the well-equipped college laboratory; physiology is slight; there is no pharmacology. There is a small museum; animals, charts, and books are provided.[6]

Shaw University

The Leonard Medical School of Shaw University was at this time one of seven medical schools for Negroes in the nation. It also had the distinction of being the first four-year medical school in the nation.[7] Founded in 1880, it served the Negro cause in North Carolina very well. Its faculty consisted of prominent and well-trained Raleigh physicians. All of these men were white and were teaching only part-time. The situation was one of philanthropy, where these physicians donated their services to the cause of the Negro. The historians had much to say about the instructors at Shaw:

> The most striking feature of the Leonard Medical School is the composition of the faculty. The members, with the exception of the president, are southern white men. They are deeply interested in their classes, and the students are devoted to their professors. The Leonard Medical School, with its faculty of southern white men and colored student body, has doubtless exerted a strong influence in preserving good feeling between the races.[8]

In 1909 Abraham Flexner was the man on the scene at Shaw, whether the administration realized it or not. Flexner could not be fooled—within one day he became aware of the entire situation, this being quite obvious in his report of 1910:

> This is a philanthropic enterprise that has been operating for nigh thirty years and has nothing in the way of plant to show for it. Its income ought to have been spent within; it has gone outside, to reimburse practitioners who supposed themselves assisting in a philanthropic work. Real philanthropy would have taken a very different course. As a matter of fact, Raleigh cannot, except at great expense, maintain clinical teaching. The way to help the Negro is to help the two medical schools that have a chance to become efficient—Howard at Washington, Meharry at Nashville.[9]

He reported that the resources available for maintenance were derived from fees and contributions, the bulk of which went to paying the practitioner teachers.

North Carolina Medical College

February of 1909 was also a bad month for the North Carolina Medical College in Charlotte. This four-year school, like Shaw, received a Class C rating.

> These facilities comprise a poor chemical laboratory, containing one set of reagents, a wretched dissecting room, and a meager outfit for pathology, bacteriology, and histology. There is no museum, no library, and no teaching aids of any kind whatever. No post-mortems are even claimed.[10]

According to another observer, there was in actuality a complete set of ordinary reagents for each pair of desks, a microscope for each student, and an ample supply of cadavers.[11]

Reaction and Results

In 1910 the public was aware of the Flexner Report. In the report he gave 22 schools Class A plus ratings, 42 schools Class A, 24 schools Class B, and 29 schools Class C. Classes A and A plus rating were given to acceptable schools, Class B to those schools that by general improvement might be made acceptable, and Class C to those schools that would require a complete reorganization to make them acceptable.

In the year of the Flexner Report, the University of North Carolina Medical School discontinued the medical department at Raleigh because the authorities felt that under the existing circumstances the department could not meet the demands of sound scholarship, this decision having been made before the Flexner Report was released.[12] However, this is not the complete story, for Flexner gives this account:

> The medical-school building at Raleigh was filthy and absolutely without equipment. I employed a photographer, who took photographs of every room in the building. When I returned to New York, Dr. Pritchett sent these photographs to the president of the university with a letter saying that they would be reproduced in facsimile in the forthcoming report. The president, who had probably never visited the medical school, was horrified. After a hurried visit to Dr. Pritchett, he called the regents together, and the clinical years were abolished, so that it became unnecessary to mention them in the bulletin that was subsequently printed.[13]

The medical schools of both Wake Forest College and the University of North Carolina were to be commended, however. Both institutions continued to improve in the following years, and in spite of their intentions and plans to have become four-year medical schools in only a few years, it was not until 1940-1950 that they both added the second two years. All in all, there cannot be much doubt that these two schools profited from the Flexner Report.

At Shaw University the end was near. In 1914 the two clinical years were dropped, meaning that graduates from the first two years would now have to complete their medical training at Howard University or at Meharry College, these two insitutions being the only two of the seven existing Negro medical schools which were accepted by Flexner. In 1918 President Meserve of Shaw University proposed to the Board of Trustees that the remaining two-year department be discontinued. This was done, but not without much anger and discontent being exchanged between alumni and administration. The Leonard Medical School was now a thing of the past.

Feelings became rather harsh down in Charlotte, where the administration of the North Carolina Medical College was extremely bitter toward Flexner. They had not even known of his visit, and furthermore, they protested that Flexner had come through during a vacation session and obviously could not have seen their facilities and equipment, as everything had been locked up[14]. There was no doubt in their minds that their medical school had produced some of the best American physicians as well as graduate physicians who as a group rated in the upper percentile on any medical board[15]. Dr. E. C. Register, a professor of medicine at the college, gave this account in one of his editorials:

> The author of the volume (Flexner Report) believes that all medical colleges are disreputable and are run for commercial purposes that have to depend, or partly depend, upon their earnings for their existence. He gives them the name "Commercial Colleges." His prejudice and unfriendly attitude toward this class of colleges instead of being constructive is very regrettably destructive of worthy enterprises that are doing much to benefit mankind. The large majority of physicians and surgeons who are engaged in teaching in the South and West do it willingly, and intelligently, and at a great financial sacrifice. This noble inclination among the members of our profession in this section of the country should be encouraged instead of ridiculed. It is only a question of time before the section of the country in which Mr. Flexner has no confidence medically will have endowed institutions. Colleges, like every other institution, will go up and down on their merits, and whether they are endowed

or not they will live if supported by clear-brained intelligent men[16].

But the damage had been done. Already the Forsyth County Medical Society had accepted the report as being authentic and therefore proposed to the State Board of Medical Examiners that graduates of the North Carolina Medical College not be admitted to their examination. The professors at the college felt too much obligation would be placed on those personally interested to raise funds with which to bring up the rating of the school.[17] However, in the next rating by the Carnegie Foundation a few years later, the North Carolina Medical College was rated as Class B without any reorganization whatsoever. The Foundation perhaps had realized its mistake.

As the end grew near, the administration tried to persuade the State Legislature in Raleigh to accept the college as the medical department of the University of North Carolina Medical School, but university officials balked at the idea of having part of their school outside Chapel Hill. All attempts at financial aid failed; the entire student body was thus transferred in 1914 to finish its medical training at the Medical College of Virginia. Thus it was that a fine and proud school disappeared from the city of Charlotte.

Not all of the complaints concerning the Flexner Report came from those associated with the lower class medical schools. Dr. William Osler of Johns Hopkins, in a letter to Dr. Howard A. Kelly, stated:

> . . . It is a great pity Flexner's report was full of errors and misconceptions—and I am stating it frankly.[18]

The report irked Osler mainly because Flexner's criticism of physicians who were "part-time" professors was referable to himself. Osler felt that the best medical teachers were those who saw private patients. In another letter to Dr. Kelly, Dr. Osler had this to say:

> I have had to go strongly for Flexner's report and I have spoken my mind freely on what I feel has been his lack of insight into the clinical condition.[19]

So it was, two of the medical schools in North Carolina were no more, both having been four-year schools. Only two two-year schools remained. Much had happened in the few years following the Flexner Report, not only in North Carolina but over the entire nation. There were, of course, many complaints and bad feelings concerning his report, but Abraham Flexner was not around to hear them—he was in Europe making a study of prostitution.

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1900 Queen Street
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Cerebral Ischemia Caused by Kinking of the Carotid Artery

Paul W. Sanger, M.D., Francis Robicsek, M.D., William L. Pritchard, M.D., Harry K. Daughterty, M.D., *and* Vincenzo Gallucci, M.D.
Charlotte

The course of the carotid artery from its origin to the base of the skull is usually a straight pass. Although gentle curves may be present, tortuosities and angulations are considered deviations from the normal[1]. These kinks and coils did not receive much clinical attention until Riser[2], in 1951, reported cerebral ischemia caused by coiling of the cervical portion of the carotid artery. Since then a limited number of cases have been recorded[2, 3-10] in which correlation was demonstrated between ischemia of the brain and kinking of the carotids.

Since buckling of the carotid artery is still not generally recognized as an important etiologic factor of "strokes in evolution," we thought it worth while to present five additional cases of hemiparesis due to coiling of the internal carotid artery. All these patients improved significantly following angioplastic operations.

Case Reports

Case 1

Our first patient, a 55-year-old business man, developed some light-headedness and headache two weeks prior to hospitalization. His headache became progressively worse and responded poorly to pain relievers. On the day of his admission his left arm and leg became numb and weak to such a degree that he was unable to hold anything in his left hand or walk without assistance. Laboratory findings, including spinal fluid examination, x-ray of the chest, electrocardiogram, and electroencephalogram were essentially normal.

Contrast visualization of the aortic arch and the carotid system was carried out using the transfemoral percutaneous technique. Dye injection study was repeated with the catheter advanced into the right common carotid artery. The anteroposterior view (Fig. 1a) did not reveal any definite anomaly, although oblique and lateral (Fig. 1. b-c) projections showed elongation and severe buckling of the internal carotid artery.

Emergency **exploration** of the right carotid artery was done. With the patient under general anesthesia, the body temperature was lowered to 31 C by external cooling. The common carotid and its two branches were dissected free; thereupon the internal carotid artery was found to be elongated and kinked; the distal segment showed only feeble pulsation. The external carotid artery was divided between double ligatures to allow mobilization of the carotid sinus. A 3-cm. portion of the common carotid was resected, followed by reanastomosis of the divided ends. This maneuver completely eliminated the kink of the internal carotid. An excellent pulsation afterwards was observed over the entire length of the cervical portion of the internal carotid artery.

The patient made an uneventful recovery and left the hospital on the tenth postoperative day without demonstrable neurologic deficit.

Case 2

A 62-year-old salesman had several episodes of dizziness and left-sided weakness three weeks previous to his admission. Following one such spell of faintness he was brought to the emergency room because, upon regaining consciousness, he was not able to stand or raise his left arm.

Physical examination revealed a mentally alert elderly man affected by left hemiparesis. His left arm was paresthetic with a positive Babinsky reflex on the left side. Chest x-ray studies showed calcification of the thoracic aorta. Electrocardiogram, electroencephalogram, and routine laboratory studies were normal.

The aortic arch and its main branches appeared normal by **contrast visualization.** The extracranial portion of the right internal carotid artery, however, was severely tortuous and kinked. (Fig. 2)

With the patient under general anesthesia and total body hypothermia (32 C), the right carotid artery was explored. The internal carotid was found coiled and attached to the vertebra by a fibrous band. There was no pulsation distal to the kink. After the adhesions were severed, the carotid sinus was mobilized by dividing the external carotid artery. There was an apparent redundant segment of the internal carotid meas-

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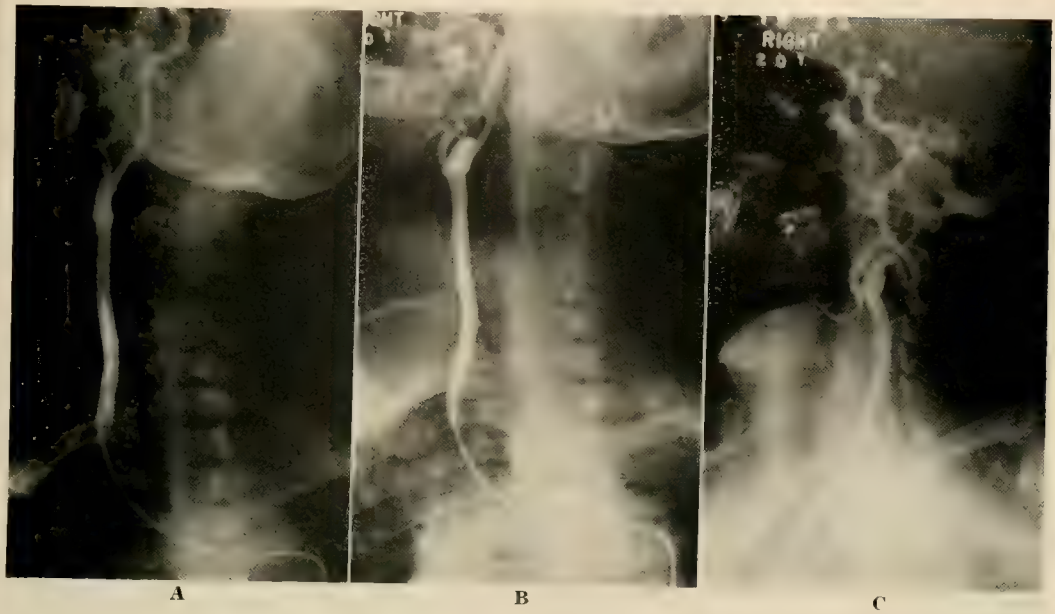


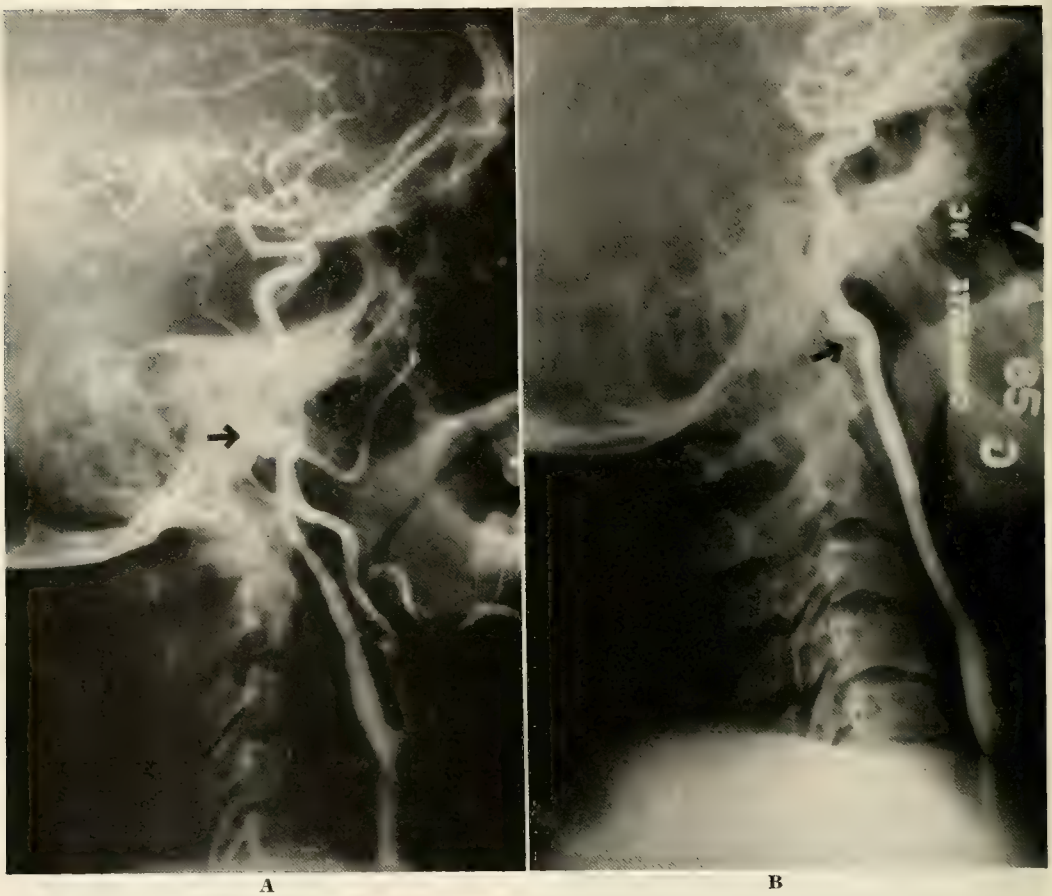
Fig. 1 (Case 1). Arteriograms, posterantero and oblique views, of the right carotid artery. There is severe elongation and kinking of the internal carotid artery.



Fig. 2 (Case 2). Dye injection study of the aortic arch. The dye demonstrated tortuosity of the arteries of the carotid-vertebral system. The right internal carotid is severely kinked.



Fig. 3 (Case 3). Arteriogram of the left carotid artery. There is 360-degree buckling of the internal carotid before it enters the bony canal.



A B

Fig. 4 (Case 4). Needle puncture arteriogram (A) before and (B) after surgery. The severe buckling and narrowing of the internal carotid artery present before surgery is completely absent on the postoperative pictures. Note the straight course of the internal carotid artery and the proximal location of the carotid sinus on the postoperative arteriogram.

uring 3.5 cm. A segment of identical length was resected from the common carotid artery. Following this procedure an end-to-end anastomosis of the common carotid was done.

The patient had an uncomplicated postoperative course and on the tenth postoperative day was discharged. His hemiparesis cleared completely during the next three months.

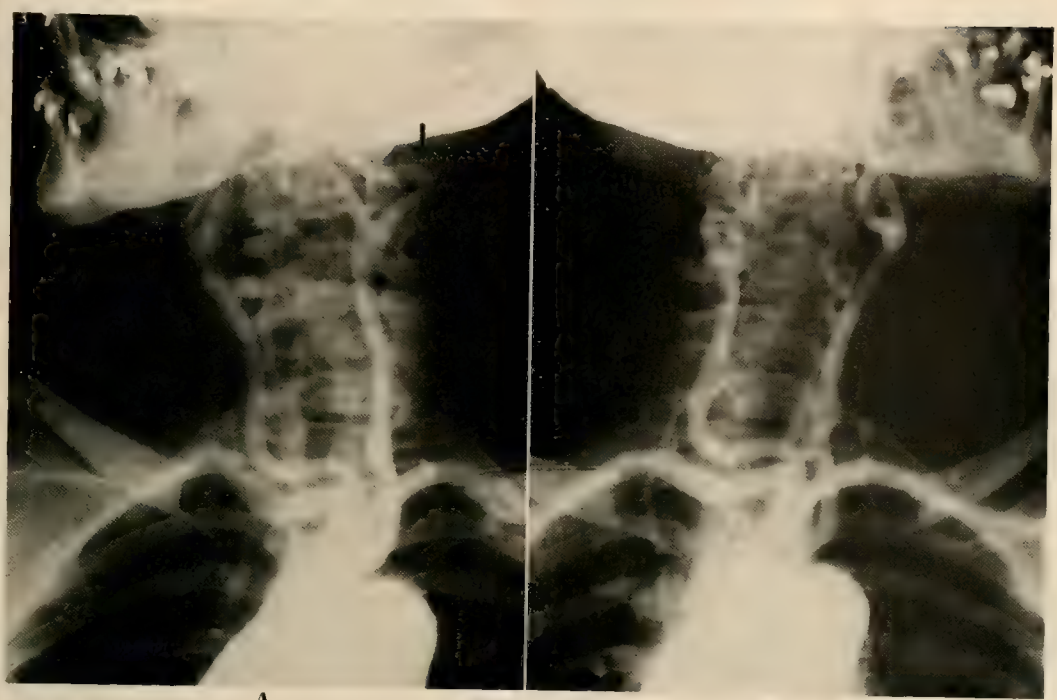
Case 3

This 51-year-old business executive had headaches for a week. Around the left eye the pain was intensive. There was also some blurring of vision of the same eye. The day of his admission he had an episode of transient right-sided weakness and lost his ability to speak for four to five minutes.

When hospitalized, the patient evinced weakness in the grip of his right hand. X-ray and laboratory studies, as well as an electroencephalogram, were non-revealing.

Anterograde percutaneous catheterization and angiography of the aortic arch and left carotid artery were carried out. There was a 360-degree kink on the left internal carotid artery at the base of the cranium (Fig. 3). The rest of the carotid-vertebral system appeared to be normal.

Operation was carried out the same day, with the patient under general anesthesia and total body (32 C) hypothermia. After the coiled left internal carotid was freed, an excess length of 4 cm became readily apparent. By resecting a generous segment of the common carotid and dividing the external carotid artery, the carotid sinus was transplanted proximally and the course of the internal carotid was straightened.



A B

Fig. 5 (Case 5). Dye injection study of the aortic arch in the (A) left and (B) right oblique planes. There is elongation of the right common carotid artery, 360-degree kinking of the right internal and 90-degree kinking of the left internal carotid artery. Note the complete cessation of flow through the right internal carotid when the head is turned to the left (B).

The patient was ambulatory the first day after surgery and left the hospital eight days afterwards. Other than mild mental depression, he had no neurologic symptoms.

Case 4

Our fourth patient was a 45-year-old nurse who complained of blurred vision of her right eye for the preceding seven months. Opthalmologic examination revealed macular degeneration which was attributed to impaired blood supply. She was treated by corticosteroids. Six days before her admission to the hospital, suddenly she was affected by dizziness and nausea. Her left leg became numb and clumsy to such a degree that she was unable to walk. Temporarily her symptoms improved, but reappeared two days thereafter and involved the left upper extremity.

She had marked motor weakness on the left side and some slurring of speech on admission. There was increased reflex activity on the left side. Ophthalmoscopic examination showed macular degeneration in the right eye. Electrocardiography, x-rays of the chest and skull, and laboratory studies, including examination of the spinal fluid, were normal.

By needle-puncture arteriography, the right carotid artery was visualized. There was a 360-degree kink of the internal carotid artery just before its entry into the bony canal. Areas of moderate narrowing of the same artery (Fig. 4a) were also found.

Because of rapid progression of symptoms, **surgery** was performed shortly after the arteriography. Using general anesthesia and total body hypothermia (32 C), the "kink" of the internal carotid artery was explored and mobilized. After the external carotid had been divided, a segment measuring 4 cm was resected from the common carotid artery and the divided ends re-anastomosed. This procedure straightened the course of the internal carotid and eliminated the coil completely.

Like the previous patients, she was able to walk without help on the third postoperative day. After an additional two weeks of extensive physiotherapy she was discharged. Her motor weakness was barely noticeable then; however, she continued to complain of dizziness and numbness in the left leg. The cerebral circulation was studied again by direct carotid arteriography (Fig. 4b) and by catheter aortography. The kink

previously present on the right internal carotid disappeared and the rest of the cerebral vasculature appeared to be free of pathologic changes. The patient continued to receive physiotherapy and showed further gradual improvement.

Case 5

This patient was a 71-year-old housewife who was admitted to the hospital because of repeated episodes of transient weakness in her left extremities, slurring of speech, and numbness of the face.

Physical examination revealed bruits over both carotid arteries and absent pedal pulses on both sides. There was a definite motor weakness in the left extremities and facial muscles. An electrocardiogram was suggestive of an old posterior myocardial infarction. X-ray of the chest revealed left ventricular enlargement and tortuosity of the thoracic aorta. Cholesterol was 325 mg./100 ml. Results of laboratory studies otherwise were within the normal limits.

Contrast visualization of the aortic arch and the carotid-vertebral system was carried out by the transfemoral, percutaneous route. Serial roentgenograms in the left and right oblique planes (Fig. 5) showed elongation of the right common carotid artery, a 360-degree buckling of the right internal carotid, elongation, and 90-degree kinking of the left internal carotid artery.

Because the patient's symptoms were indicative of right hemispheric ischemia only, the **surgical procedure** was limited to the right carotid. Both the common and the internal carotid arteries were mobilized by extensive dissection and by division of the external carotid. A good pulsation was observed on the previously collapsed internal carotid artery following the resection (and re-anastomosis) of a 7-cm. segment of the common carotid artery.

The operation, which was performed with the patient in general body hypothermia, was well tolerated. She was ambulatory on the second postoperative day and showed rapid improvement during her additional eight days in the hospital.

Discussion

Kinking of the carotid artery is an abnormal but by no means unusual finding. Metz and associates[8] found some degree of tortuosity in 16% of 1,000 carotid arteriograms. Defective development[1, 7], arteriosclerosis[10], and fibrous bands[5] have been labeled as possible causes of this anomaly.

Whatever the cause, the important question is whether or not the coiling of the carotid artery produces cerebrovascular symptoms. While it has been demonstrated that cerebrovascular accidents are more frequent in patients with carotid kinks[8], there are many who go through life without clinical symptoms. Therefore the "carotid kink" should be accepted as underlying pathology only in the presence of corresponding clinical symptoms—such as transient bouts of dizziness, visual disturbances, blackout spells, contralateral hemiparesis, or hemiplegia.

Naturally the question arises: What to do with a symptomless "kink?" Rarely does

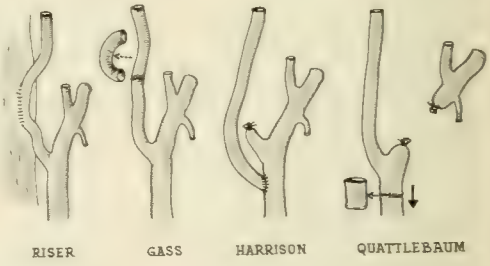


Fig. 6 (Case 6). Different surgical methods designed to correct buckling of the internal carotid artery.

this problem confront the physician, primarily because carotid arteriograms are seldom done except in the presence of some kind of neurologic deficit. It is still possible, however, to detect such an anomaly while investigating other arteries, such as the subclavian. Our opinion is that symptomless coils of the carotid artery should be handled conservatively unless there is definite arteriographic evidence of narrowing or obstruction. Because of the danger of a sudden thrombosis, these cases should undergo correction. Three such cases were reported by Harrison and associates[5]. We also had an opportunity to observe a 27-year-old man, seemingly in perfect health, who died suddenly because of a carotid kink with superimposed thrombosis of the internal carotid artery.

The *results of surgery* in patients with strokes or "strokes in evolution" due to buckling of the carotids are much better than in those having intraluminal arteriosclerotic lesions. This is probably due to the fact that most of the patients with "kinks"

are younger and probably have better intracranial collaterals[5].

The first operation to correct this condition was done by Riser[2], the first to recognize this syndrome. He sutured the redundant loop to the sternocleidomastoid muscle (Fig. 5). Gass[1], Smathers[11] and Hurwitt[6] advised the resection of the coiled portion of the internal carotid, followed by an end-to-end anastomosis. Harrison[5] divided the internal carotid artery and implanted it proximally into the common carotid.

We employ the method described by Quattlebaum[10] in 1959. This operation consists of extensive dissection and mobilization of both the common and internal carotid arteries. The external carotid is divided between double ligatures. A generous segment of the *common* carotid is resected and the stumps re-anastomosed—thus the course of the *internal carotid* is straightened (Fig. 5). This method has the advantage that the anastomosis is done at the common carotid, which is large and easy to work on.

We found this method, combined with moderate general body hypothermia, to be a safe and effective way of handling the syndrome of "carotid kinking."

Summary

Kinking of the carotid artery may be the cause of cerebral ischemia and lead to hemiparesis or hemiplegia. In our opinion, these patients should undergo arterioplastic operations.

Five patients with "strokes in evolution" caused by carotid artery buckling are presented. All improved significantly following carotid arterioplasty.

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Carcinoma of the Fallopian Tube—A Diagnostic Challenge

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Recent experience with the only primary carcinoma of the fallopian tube recorded in a 24-year experience at the North Carolina Baptist Hospital focused attention upon the diagnostic delay associated with this as well as other obscure pelvic lesions. Hu and associates[1] reported that, regardless of the therapeutic modalities employed, survival of patients with tubal carcinoma decreased with the degree of dedifferentiation of the primary lesion. The latter, according to many authorities, is a function of the duration of the process and is not related to inherently distinct cell types. Based upon this concept as well as purely logical grounds, it is evident that early diagnosis should improve ultimate salvage. The purpose of this report is to present a case of fallopian tube carcinoma diagnosed preoperatively and to discuss the diagnosis of such lesions.

Case Report

A 60-year-old unmarried school teacher was first seen on June 9, 1962, with a chief complaint of vaginal discharge. For the preceding six to nine months she had experienced an intermittent watery vaginal discharge, frequently occurring in gushes. She had been seen by her local physician and treated with numerous local medications, all without improvement. Menses had ceased in 1947 following right salpingo-oophorectomy, partial left oophorectomy and appendectomy performed for a papillary cystadenoma of the right ovary. There had been no subsequent vaginal bleeding, pelvic pain, nor weight loss, and the review of systems was negative except for chronic constipation.

The past medical history and family history were noncontributory.

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Physical examination

The patient was a healthy-looking white woman of apparent stated age. The blood pressure was 140/100, pulse 84, weight 131 pounds, height 5 feet 3 inches. The general physical findings were within normal limits. There were no palpable abdominal masses nor significant tenderness, and a lower midline incision was well healed.

Pelvic examination revealed atrophic but otherwise normal external genitalia with feminine hair distribution. Bartholin's and Skene's glands were normal. The introitus admitted one finger loosely. Speculum examination showed the vaginal mucosa to be mildly atrophic. The cervix was conical, 1.5 cm. in dimension, and clean, with a pinpoint external os. Papanicolaou smears obtained from the cervix and vaginal pool were reported as class I. The uterus was sounded without difficulty to 3 inches. There was no evidence of cervical obstruction, and no discharge followed this procedure. On bimanual examination the uterus was anterior, measured 10 x 6 x 5 cm, and was smooth, symmetrical, slightly softened, and turgid. No abnormalities of the adnexal regions were noted, and the rectal examination disclosed no abnormalities.

Upon arising from the pelvic examination the patient experienced a gush of serous material from the vagina and was immediately re-examined. The vagina contained approximately one-half ounce of thin, straw-colored material which continued to pour from the external os. Papanicolaou smears of these secretions were reported as class II.

Dilatation and curettage were recommended to define what was thought to be intrauterine disease. The patient was admitted June 26, and her findings were essentially unchanged. A voided urine specimen was normal; the hemoglobin was 11.7 gm/100 ml, and the white blood cell count was 7,000

with a normal differential count. On the following day, with the patient under general anesthesia, the pelvic findings were unchanged. The cervical canal was progressively dilated to 10 mm. Approximately 60 ml of serous straw-colored material was recovered from the uterine cavity. Cell block of these secretions was reported as class II. Differential curettage recovered only two small fragments of tissue from the endometrial cavity, which were reported as "atrophic endometrium."

Following discharge from the hospital the patient experienced persistent intermittent gushing of fluid from the vagina. The cervix remained patent. Methylene blue given orally August 25 colored the urine but failed to change the color of the vaginal discharge. Repeat Papanicolaou smears obtained on September 5 were interpreted as class I.

Although the pelvic findings were unchanged, the patient found the symptom complex intolerable, and therefore laparotomy was scheduled during the Thanksgiving vacation from school. On September 22-23 she experienced two days of bloody vaginal discharge and three weeks later noted the onset of slight tenderness in the left lower quadrant. This tenderness was progressive, and on examination October 27 an indiscreet left adnexal mass measuring 4 cm was palpated.

A presumptive diagnosis of left fallopian tube carcinoma was made, and the patient was admitted on November 7 for laparotomy. The physical findings were essentially unchanged from those previously noted, the weight remaining constant at 132 pounds. On preoperative evaluation the urine was found to be normal, the hemoglobin 12.2 gm/100 ml, and the white blood cell count 6,000 with a normal differential count. The blood urea nitrogen was 21 mg/100 ml. X-ray examination of the chest showed minimal elevation of the left hilus due to old fibrotic changes in the left upper lobe of the lung and a contour of the heart which would suggest some left ventricular preponderance without overall cardiac enlargement. An electrocardiogram was normal.

On November 8 laparotomy was performed with the patient under general anesthesia. With the exception of adhesions between the omentum and the previous operative incision, the upper abdomen was completely free of visible or palpable abnormalities. The right tube and ovary were absent. The uterus appeared atrophic but otherwise normal. The left fallopian tube was elongated and extended over and terminated on the superior surface of a 5-cm thin-walled cystic mass which was nestled deep in the left pararectal fossa against the lateral pelvic wall. The uterus, left fallopian tube, and attached cystic mass were removed with relative ease. The left ureter coursed along the posterolateral surface of the cyst wall, but was dissected free without difficulty.

The patient's postoperative course was complicated by atelectasis and an elevation of temperature to 102.6 F on the third, fourth, and fifth postoperative days. These complications responded to positive pressure oxygen and antibiotic therapy. The patient's course thereafter was normal and she was discharged on November 25.

The patient has been examined every three to six months since her operation and is entirely asymptomatic. A chest x-ray made in February, 1965, was normal. The vagina is clean and Papanicolaou smears of the vaginal cuff have been consistently reported as class I. The pelvis has remained free of palpable abnormality as of the most recent examination in April, 1965.

Surgical pathology

Grossly, the uterus appeared normal and measured 5.5 x 4.5 x 2.0 cm. The attached oviduct measured 4.5 cm in length and communicated with an attached thin-walled cyst measuring 5.5 cm in diameter (Fig. 1b). Lipiodol injected into the uterine cavity passed through the fallopian tube into the cavity of the cyst (Fig. 1a). On section the inner surface of the cyst was found to contain many papillary structures loosely attached to the lining (Fig. 1c). Microscopically, the uterus was normal, and ovarian tissue could not be demonstrated. A well differentiated papillary carcinoma was lim-

ited entirely to the mucosa of the tube and did not extend into the underlying muscularis (Fig. 1 d-f). The previous operative material was reviewed and showed a papillary cystadenoma of the right ovary. The tubal lesion met the pathologic diagnostic criteria of Hu and others, and in the opinion of the pathologist represented a primary papillary carcinoma of the left fallopian tube.

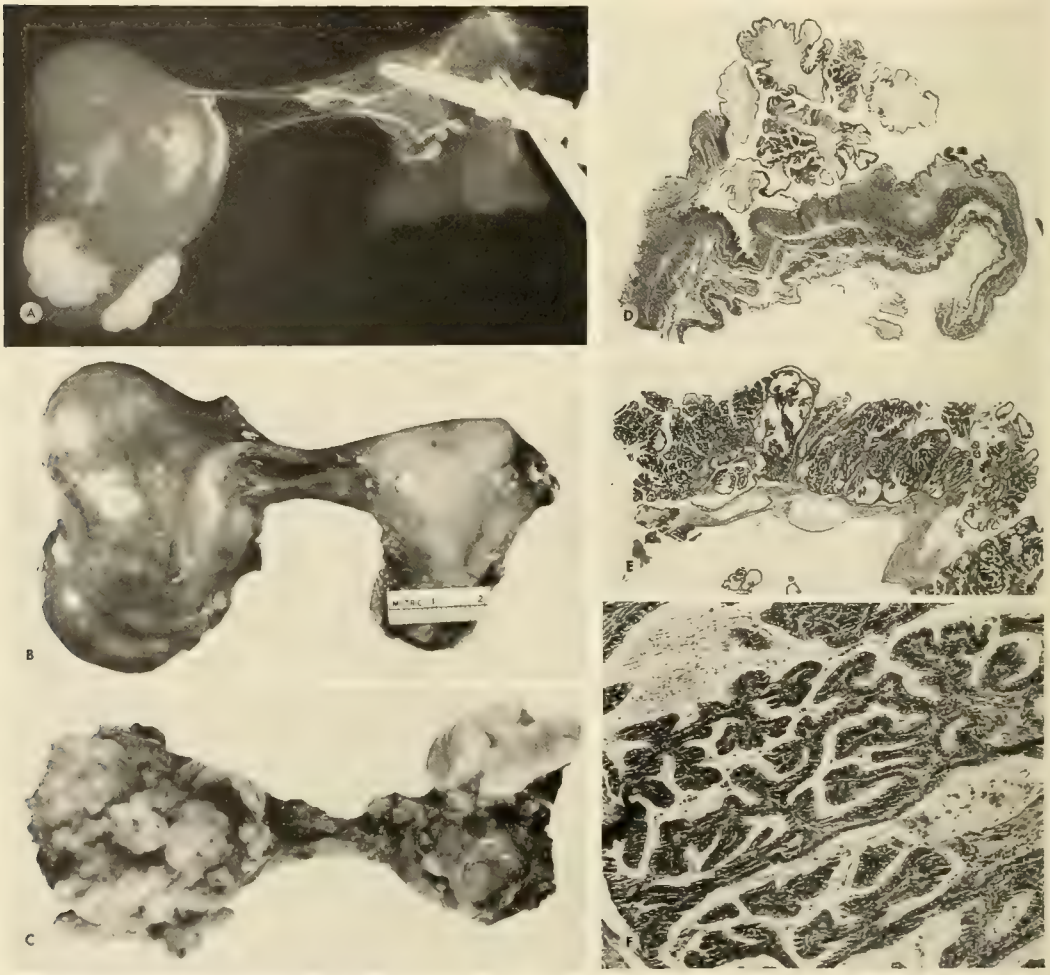


Fig. 1. a) Photoradiograph of lipiodol injected postoperatively via the left cornua of the uterus through normal fallopian tube into the neoplastic tubal cyst. External lipiodol contamination obscures the tubal lumen but comparison with the grossly visible tube in Fig. 1-b identifies the lumen as the only continuous communication between the uterus and the tubal cyst;

b) Posterior view of resected specimen showing the thin wall of the tubal cyst and the segment of normal fallopian tube extending into it;

c) Opened view of tubal cyst illustrating the grossly papillary nature of the lesion (same scale as Fig. 1-b);

d) The tube wall and lesion show the papillary nature of the tumor and its limitation to the tubal mucosa (hemotoxylin and eosin x 14);

e and f) The well-differentiated nature of the carcinoma is evident (hemotoxylin and eosin x 14, and x 90).

Discussion

There are no symptoms or signs pathognomonic of fallopian tube carcinoma. Sedlis' review[2] of 232 cases illustrates the problem. Spotting or bloody discharge either between the menses or after the menopause occurred in 119 patients. Pain variously described as cramping, colicky, or vague pressure occurred in 111 patients. Leukorrhea, frequently copious and occurring in sudden spurts, was reported by 71 patients. The classic triad of metrorrhagia, pain, and leukorrhea was observed in only 14 cases, and 9 patients were entirely asymptomatic. In general, the initial symptoms are not significant to the patient, and therefore there is considerable patient as well as diagnostic delay. In Sedlis' review 50% of the patients waited over three months and many waited years before seeking medical advice.

The physical findings of tubal carcinoma may be equally obscure, although in Sedlis' review a palpable pelvic mass was present in 60% of patients. Latzko described the oft quoted "hydrops tubae profluens" as a sudden emptying of a fallopian tube filled with accumulated secretions producing copious vaginal discharge, occurring either spontaneously or after manual compression, which may or may not be associated with a disappearing pelvic mass. Although not a specific sign of tubal carcinoma, this phenomenon is certainly suggestive and was the primary finding which directed attention to the tube in the present case.

Recently, positive Papanicolaou smears have been reported as confirmatory evidence of malignancy and as the only positive indication of malignancy in patients with tubal carcinoma. Recovery of positive smears is dependent upon patency of the cornual end of the tube, and probably upon the volume of secretions collected. It is estimated that cytosmears will be positive in 60% of the cases when the cornual end of the tube is patent. When persistently positive smears follow usual efforts to define malignancy in either the endometrium or the cervix, particularly in patients of climacteric or postmenopausal age, laparotomy is mandatory.

Hysterosalpingography has been useful occasionally, but the procedure has been abandoned generally because of the risk of tumor dissemination. Similarly, recovery of positive cytosmears from cul de sac aspirations is of equivocal value for the diagnosis of an early lesion, since extension beyond the site of origin is implied.

Emge[3] summarized current attitudes toward the diagnosis of fallopian-tube as well as ovarian carcinoma when he stated: "It is not so much a great diagnostic omission to fail to diagnose tubal carcinoma preoperatively as to fail to recognize the need for surgical exploration whenever an obscure pelvic condition exists, especially at cancer age levels."

Summary

A case of fallopian tube carcinoma is reported which is illustrative of many of the vagaries of this lesion. Persistent, intermittent, gushing, watery vaginal discharge following negative dilatation and curettage was indicative of a lesion higher in the genital tract, despite the consistently negative cytosmears. Presumptive diagnosis of fallopian tube carcinoma was not considered until a palpable mass and localizing symptoms developed. Failure to consider the proper diagnosis resulted in a delay of at least three months before laparotomy was performed. The operative findings, postoperative roentgenograms, and the gross and microscopic pathologic findings confirmed the diagnosis of fallopian tube carcinoma. Fortuitously, the lesion was discovered in an early, prognostically favorable form, and the patient has survived three years without supplemental radiation therapy. Although cytosmears were not of value in this case, persistently positive smears in the absence of cervical or uterine pathology, plus an awareness of the possibility of tubal carcinoma, offer the only current hope toward early diagnosis of this obscure entity.

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The Treatment of Delirium Tremens

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The clinical syndrome known as delirium tremens is as old as Man's use of alcohol as an intoxicant—almost, one may be sure, as old as Man himself. Yet our earliest clinical descriptions of the condition date back only to John Lettersom's, in 1787, and Samuel Pearson's, in 1801. The latter first called the process "brain fever," and in 1813 Thomas Sutton applied the present term "delirium. tremens" (Romano[1]).

Attempts to treat patients with this syndrome include an astounding range of remedies, and, according to their proponents, all have been successful. This enthusiasm for some form of therapy is understandable, since the reported mortality for untreated cases is appallingly high. In the light of the many treatments recommended, one is obliged to ask, "What is the treatment of choice?"

Our study of patients with delirium tremens began as an attempt to evaluate the efficacy of phenothiazine derivatives in comparison with other sedatives. As we gathered our data, however, it became apparent that the task would not be simple. We therefore set about collecting information about all drugs in use today, as well as other factors which might influence the course of this disease. Our hypothesis was that careful scrutiny of current methods of treatment might delineate the most important factors in the treatment of the syndrome.

Material and Methods

The charts of 111 cases with a final diagnosis of "second-stage" delirium tremens[1] treated at the Veterans Administration Hospital in Durham during the period from 1957 to 1962 were reviewed. The following information was abstracted:

1. Age
2. Symptoms
   a. Hallucinations
   b. Disorientation
   c. Level of activity
3. Complications
   a. Orthopedic
   b. Surgical
   c. Urologic
   d. Medical
   e. Neurologic
   f. Others.
4. Therapy
   a. Parenteral fluids
   b. Vitamins
   c. Anticonvulsants
   d. Sedation
   e. Tranquilizers with phenothiazines
5. Duration of symptoms
6. Duration of therapy
7. Mortality

This information was then used to classify the cases into two categories: (1) uncomplicated and (2) complicated by other diseases. A third group of patients who died was analyzed separately. The patients in each of these groups were then separated on the basis of whether they had received what we had arbitrarily decided was adequate therapy.

We considered the minimal criteria for "adequate therapy" in each group to consist of the following:

1. Fluid—an average of 3 liters per day
2. Vitamins—one multivitamin tablet or its equivalent per day
3. Sedation—paraldehyde, 20 cc per day, or barbiturate, 200 mg per day, or chloral hydrate, 1 gm per day, for any one or more days during the acute phase of the illness.
4. Anticonvulsant agents — diphenylhydantoin sodium (Dilantin) or its equivalent
5. Tranquilizers — perphenazine (Trilafon) 16 mg per day; chloropromazine (Thorazine) 200 mg per day, promazine hydrochloride (Sparine Hydrochlo-

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Table 1

Mortality in Relation to Complicating Disease and Duration of Treatment

	No. Patients	Mortality	Duration of Rx
Uncomplicated	50	0	4.4
Complicated			
Infection	11	3	6.0
Cirrhosis	11	1	6.9
Seizure	9	0	5.2
Rx and/or Surgery	9	0	6.2
Miscellaneous	6	2	1.8
Combination	15	3	7.4
Total Complicated	61	9	5.5
Grand Total	111	9	5.3

ride) 400 mg per day; or trifluoperazine hydrochloride (Stelazine Hydrochloride) 8 mg per day.

The groups of patients were then analyzed as follows: (1) the number of patients in each category, exclusive of deaths; (2) the average age of patients in each category; (3) the average duration of treatment in each category; (4) the number of deaths in each category.

Results

The results of this study are summarized in the accompanying tables. In Table 1 it will be noted that all the deaths in this series occurred in patients with complicated conditions. Particularly lethal were infections and multiple complications. Concomitant disorders also profoundly influenced the duration of illness, for a comparison of the two categories discloses that simple delirium tremens had a shorter course. Also, the mean age at which the disease occurred was lower in group 2 (complicated cases) than in group 1.

In Table 2 is summarized the effect of adequate treatment on the duration of illness. The result of this analysis was surprising, for those patients whose treatment had been inadequate by our criteria recovered more quickly than those who had had adequate treatment. This observation may be an artifact, since inspection of the patients' histories indicated that the amount of treatment a patient received was determined by the severity of his illness. Thus more of the acutely ill patients received adequate treatment than did those with milder attacks.

Table 2

Duration of Treatment of Patients Receiving Adequate or Inadequate Therapy (111 patients)

	Adequate		Inadequate	
	No. Patients	Duration of Rx (days)	No. Patients	Duration of Rx (days)
Fluid	35	7.0	76	4.5
Vitamins	94	5.5	17	4.1
Sedation	54	6.0	57	4.6
Anticonvulsants	31	5.7	80	5.1
Tranquilizer	62	5.9	49	4.6

The prolongation of symptoms, therefore, was probably a function of the severity of the illness rather than of the adequacy of treatment.

In Table 3 the efficacy of various phenothiazine drugs is compared. Here it will be noted that no one tranquillizer proved better than another nor better than sedatives alone.

Table 3

Patients Treated only with Adequate Dosage of one Phenothiazine or Sedative

	No. Patients	Duration of Treatment (days)
Trilafon only	35	4.77
Thorazine only	9	4.66
Sparine only	8	6.50
Stelazine only	3	2.00
Sedation only	11	4.63
No sedation or tranquilizer	11	4.55

Discussion

It is clear that our attempt to investigate the importance of certain factors in the treatment of delirium tremens was unsuccessful. This failure is exemplified in the rather unique finding that treatment is deleterious to the patient. In the light of the old adage that figures don't lie but liars figure, we have asked ourselves if we are liars or is it possible that the artifact cited in our experiment led to the unexpected outcome. In our effort to clarify this issue we have reviewed the literature with the hope of reaching a more satisfying conclusion.

The history of the therapy of delirium tremens is long and complicated, and fraught with vivid and imaginative ideas as to the best and most efficacious method to employ. The basic problem is, as usual,

one of definition. When one author "proves" that A is superior to B or that B is better than C, he rarely defines his diagnostic criteria. Therefore, the exceptionally low mortality reported by some authors or the exceptionally high rate of others does not take into account the difference between incipient and full-blown cases of delirium tremens, between complicated and uncomplicated cases, or between patients with marked metabolic derangement and those with minimal changes. Nevertheless, certain basic principles of therapy are reiterated again and again.

Principles of therapy

In 1802 Samuel Pearson, according to Romano[1], stressed the importance of sedation, fluids, and nourishment. He advised the cautious use of opium in order to bring about sleep and rest. He suggested that the patient be fed wine, nourishing gruels, and soups. He was opposed to the use of restraints because of the exhaustion they provoked, and he said that "sympathy, tact, and understanding should be expressed by the physician, attendants and family."

John Armstrong[1], in the early nineteenth century, also emphasized the importance of sedation:

> If the patient falls into a sound and tranquil sleep he generally awakens refreshed and from that time recovers rapidly; but short disturbed slumbers accompanied by **subsultus tendinium,** from which the patient starts with afright and then falls into a low muttering delirium, are among the most dangerous indications. I have seen one case accompanied by convulsions from the very begining of the disease; but they were speedily subdued by a large dose of ether, and the patient recoverd very well.

In 1813 Thomas Sutton reported the use of opium for sedation and lauded bleeding as the treatment of choice. Of ten patients he bled, all recovered; of the six he did not bleed, four died[1].

George Hayward, at about the same time, did not give opium but thought highly of bloodletting, purgation, warm baths, and "liberal cupping on the abdomen and head, the latter especially."[1] In 1831 John Ware advised "nutritious liquids," avoidance of restraints, and use of an adequate nursing staff[1].

Choice of sedatives

Subsequent writings usually reiterated the desirability of sedation, hydration, and improved nutrition. The introduction of anticonvulsants led to their addition to the list of indicated therapies. In the twentieth century almost everyone accepts these four principles; however, some later reports have discussed the advantages of certain sedatives. The question arising over and over has been "What is the sedative of choice?"

Piker[2], in 1937, restated Armstrong's remark about the value of sedation.

> It is well known that if the delirium tremens patient can relax into sleep for 6 or 7 hours, the disease is well on its way to being overcome. To obtain this sleep, however, is no simple matter. A search through the literature for recommended sedative measures in Delirium Tremens elicits a list that rivals the pharmacopoeia as to all-inclusiveness, from morphine to hydrotherapy, and from the injection of magnesium sulphate intraspinally to soothing reassurances.

Piker found paraldehyde the most satisfactory sedative, and barbiturates unsatisfactory because of their ineffectiveness when given in small doses and the risk of circulatory depression attending larger doses. As a last resort, he prescribed a single intravenous dose of Sodium Amytal (0.6-0.9 gm).

Ranson and Scott[3], in an excellent study done in 1911, found that ergot had an excellent sedative effect, producing a quieter delirium and less need of restraint, reducing tremor and the tendency to "wet brain," and requiring less hypnotic. Veronal was the most efficacious and least dangerous of sedatives in their series, and in "second-stage" delirium tremens, other sedatives were contraindicated. In addition to ergot and Veronal, they used whiskey in treating the first stage of the attack, Sorensen[4] in 1959 corroborated the usefulness of Veronal. Avol and Vogel[5], in 1955, suggested that reserpine was the best sedative.

With the introduction of the phenothiazines, many studies were conducted to evaluate the usefulness of these agents in the

treatment of delirium tremens. Hart[6] tended to favor promazine, for its tranquilizing effect, over paraldehyde, but found no significant difference between the two drugs. Fazekas and others[7] found that promazine did not control convulsions nor autonomic manifestations such as hypertension, diaphoresis, and tachycardia. He did suggest, however, that the drug facilitated management of the patient. Laties and others[8] found no significant difference between promazine and chlopromazine. Barody and others[9] thought that the period of hallucinations was shortened by the use of trifluoperazine hydrochloride in comparison with promazine and chlorpromazine. There is no evidence cited to indicate that these drugs have revolutionized the treatment of delirium tremens, though they have widened the therapeutic armamentarium.

Efforts to treat "the cause"

There have been many hypotheses as to the etiology of delirium tremens and many attempts to treat the postulated cause rather than the symptoms as we presently do. Two of these theories have been much discussed in the literature and are worth reviewing, not only because they are important, but because the number of studies and contradictions bears witness to the confusion in the field and to one of our main premises—that a fully controlled scientific study has never been carried out. Until it is, we may postulate and theorize at length and then admit that we are treating the disease empirically.

The use of *magnesium sulfate* in treatment has recently been much discussed. Flink[10] observed that the syndromes of magnesium deficiency and delirium tremens were similar, and that serum magnesium values were low in delirium tremens. On the basis of these observations he hypothesized an etiologic role for magnesium. Beroz[11] corroborated his findings. Krystal[12], Wacker and Vallee[13], and Tavel[14], rejected Flink's hypothesis and marshalled considerable evidence that magnesium deficiency is only an associated finding. Thus Piker's early observation that magnesium had a beneficial effect on the patient was probably related to the sedative effects of the substance and not to any etiologic role.

Alcohol has also been used in the treatment of this disease, on the assumption that since its withdrawal is responsible for the development of symptoms, replacement should be beneficial. The earliest suggestion that abstinence from alcohol in addicted persons was of no etiologic importance was made by Walter Channing in 1819. Other authors[8], have presented considerable evidence to corroborate his point of view. Isbell[16], however, investigated this point experimentally by administering varying large doses of alcohol to non-alcoholic subjects over varying periods and then abruptly withdrawing the drug. He observed abstinence symptoms in these subjects and concluded that delirium tremens could be produced only by rapidly falling blood alcohol levels, and that the severity of the symptoms was correlated with the length of time and amount of alcohol ingested during the period of intoxication. Although there is evidence that withdrawal is significant in the etiology of the syndrome, alcohol seems to have little therapeutic effect and is rarely used by modern therapeutists.

Mortality

Finally the failures of treatment must be considered. Ranson and Scott[3], in 1911, reported various mortality figures: at Cook County Hospital, 39.2% of all "second stage" cases, 27.2% of uncomplicated cases, and 45.6% of complicated cases; at Massachusetts General Hospital 59.3% of all "second stage" cases and 72.3% of complicated cases. In 1937 Piker and Cohn[17] reported 10% to 12% mortality at large and 5.3% in their study. In 1955 Avol and Vogel[5] reported 6.6%. Krystal[12], in 1959, reported 2.5%, and in 1961 Giacobini and Salum[18] reported 14% before their study was conducted and no deaths in patients receiving their treatment. Obviously the mortality varies widely, owing, one may be sure, to the lack of a clear-cut definition of the syndrome. The figure usually quoted when all sources are taken into account is 10% to 12%, as Piker states it.

Conclusion

The results of the study reported here, as well as a review of the literature, indicate that the treatment of delirium tremens by any method results in a lowering of the mortality. Moreover, what constitutes adequate therapy has not been determined. Controlled studies have not been carried out. The four components of accepted therapy are hydration, sedation, restoration of nutrition, prevention of convulsions, and a vigorous attack on any complicating diseases that may be present.

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The Medicine Bag—An Indian Relic

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My first contact with the medicine bag was at the Town Creek Indian Mound State Park near Mount Gilead, North Carolina. Here, preserved in a showcase in the visitor's lounge, is one of these so-called medicine bags, or bundles, which was found during the excavations of this old Indian community. Town Creek Indian Mound, located on the bank of Little River in southwestern Montgomery County, has been undergoing a transition over the past several years toward becoming a first-rate state historical park. It holds two primary attractions for me personally: (1) It is located in my home county; and (2) my great-great-great-grandfather, so the story goes, was supposedly a descendant of the Creek Indians, who in the seventeenth century and for many years previously had come to this site for their most important ceremonies. Here, runs the

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legend, they buried their important dead, installed their new chiefs, and held other high ceremonies.

While visiting the mound recently, I became interested in the medicine bag on dis-

play there. The resident archaeologist said that it was only one of several which had been found in the excavations.

The bag itself is made of leather—a purse-like affair with a string by which the medicine man or warrior attached it to his belt. In certain other tribes the bags were made of a whole animal hide, usually fur, but bags made of snake and bird skins have been uncovered. If the whole skin was used, the head, tail, and legs were beautifully decorated with feathers, binding, and quillwork. Other bags, such as the one on display at Town Creek, were made of a piece of leather from the hide of an animal.

Content

The contents of the medicine bags were quite varied. This one contained feathers, an arrowhead, some beads, a few small stones, a piece of what is thought to be an antler, a couple of teeth, and some fragments of bone. Each of these objects is related to a special story, a special event, or some incident betokening good luck.

How each of these objects came to be incorporated into the bag is a story within itself. For example, the small stones might have been preserved because someone had clutched them in his hand while enduring the pain of some acute illness or injury which he survived. Because they were associated with this person's recovery, they were presumed to possess some magical or mystical curative power. Perhaps this was the ability to drive away evil spirits or the embodiment of some "good spirit" which, so long as the stones were in one's possession would bring good health.

The piece of antler was perhaps from a many-pointed buck, a lucky kill for any warrior. The arrowhead may have been the very one that had killed the deer, or one that had inflicted a wound from which the victim had recovered. The feathers could have come from the headdress of a chief known to have been blessed with a long and healthy life.

The stories and events connected with these objects can only be speculated, but it is known that some happy event or turn of luck was responsible for the inclusion of each in the medicine bag and that their presence on the person of the owner was supposed to bring him health and good luck.

Medicine bags were also known to contain medicinals, usually in the form of leaves or roots. These could be taken as they were, or they could be chewed or brewed as a tea. Notable among the teas was the "black tea" made from the leaves of the Yappon bush, which the Indian drank before taking part in any ceremony in order to purge himself from all evil spirits (as well as anything else that might have the misfortune of residing in the gastrointestinal tract at the time).

The Indians were affirmed demonologists, believing that both good and evil spirits could reside in almost anything found in nature. Anything, then, could be found in a medicine bag, the number and variety of objects contained therein determining its value. Some tribes, however, required the inclusion of certain objects, usually some form of equipment necessary to participation in tribal ceremonies.

Ownership

Not every member of the tribe possessed a medicine bag, and the bags were not all of equal value. In some tribes every male warrior had one and considered it his most prized possession, while in others ownership was limited to the tribe's elite, including the medicine men.

In the former tribes, notably those of the plains, the bag assumed connotations outside the field of medicine. As previously pointed out, the bag was a warrior's most prized possession, and for it to be lost or captured by the enemy was to suffer a blow which could only be recouped by capturing two bags from the enemy—a sort of mixture of medicine and politics.

In other tribes, such as the Creeks, medicine bags could be owned only by those at the top of the totem pole. In this upper circle the bag was prized at least as highly as by the warriors of the plains. It was often passed from father to son, being handed down through many generations and becom-

ing ever more stuffed with "sacred" objects as time passed. In other instances, the bag was buried with its owner when he died—another custom that was most notable among the Indian hierarchy. It is not surprising that a number of bags were found at Town Creek, where only the elite were entombed.

Uses of the Bag

The uses of the medicine bag were as many and as varied as their contents, several having been implied previously. They could serve as a beautiful decoration, a trophy for warriors, a token of the constant companionship of the good spirits, or as a shield against evil ones.

In addition to these functions, the medicine bag often played an important role in the ceremonies of the medicine man. Perhaps he shook it over the sick as he danced around them, or rubbed it over a painful area of the body in order to draw out the spirits which were causing the pain. The bag was only one of the many tools used by the medicine man to effect his cures, but, to be sure, the good spirits associated with the bag were considered to be a prime factor in the recovery of the Indian who possessed it.

The bag also held religious significance. A special prayer or chant was used in connection with each bag, and other prayers were associated with the separate items that made up its contents. When the Indian meditated upon the bag and its contents he would recite these prayers and chants much as a devout Catholic would say a Rosary. If a bag contained 25 objects, it was referred to as a 25-song bag, this being an expression of its value.

Conclusion

I find the medicine bag of the Early American Indian to be an interesting relic and feel that it provides an insight into the primitive medical practices of these First Americans. And yet one cannot but smile when he sees the doctor of today as he strides by, tightly grasping his little black bag, which for much of the modern world remains firmly associated with the casting out of disease and the restoration of health

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This paper represents an assimiliation of material from the following books and articles and from conversations with the archaeologists at the Town Creek Indian Mound State Park in Mount Gilead, North Carolina:

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DECEMBER, 1965

ACTIONS OF THE EXECUTIVE COUNCIL

1. After lengthy discussion the Council adopted a resolution agreed upon by the Blue Shield Committee and the Committee Liaison to the Commercial Insurance Companies in prior joint meeting, to authorize the Committee on Blue Shield to develop and conduct a statewide survey of current and prevailing charges for medical service in preparation for the implementation of the Medicare Bill, July, 1966.

It is anticipated that developed schedules will be confidential, flexible, and the sole property of the Medical Society by virtue of subservience of the Blue Shield Committee to the Executive Council of the Medical Society. The Council may direct inter-communication with other committees having functions pertinent to the problems involved.

2. The Council discussed a recommendation previously adopted at a meeting in September to establish a Health Planning Commission with broad responsibility for development in health affairs, but specifically to give attention to the provisions of the now enacted "DeBakey" Heart Disease, Stroke and Cancer Bill. Deans of the three medical schools and representatives of the Medical Society have been engaged in preliminary discussions. The proposed Commission will include representation from the medical schools, the Medical Society, Medical Care Commission, Board of Health, Hospital Association, Board of Welfare and other related health agencies. A proposal to set up an Executive Committee from the Commission was also approved, the latter to act as a steering committee to proceed with an application through the Governor for a planning grant as authorized by the DeBakey Bill.

3. The Council passed a motion authorizing an application for charter of a Medical Foundation. A facility for the headquarters office is being considered which may entail the sale of property held on the Durham highway at a large capital gain. As you perhaps know, the Department of Internal Revenue has insisted on payment of the Federal fraction of Unemployment Security Tax back to 1952, even though a tax-free status was awarded the Society by the State Department at that time. A foundation would be permitted to receive funds which could be directed to numerous educational and philanthropic activities.

J.S.R.

* * *

THE FLEXNER REPORT

Probably the only places in the United States unaffected by the Flexner report were the states and territories that did not have a medical school. Even they were affected eventually, however, for the report stirred up medical education to the point where the ripples have not yet stilled. Foundations today dream of starting a project that will have as much impact as Flexner's

work, which seems somewhat casual by today's standards.

In North Carolina, so long as Davidson College has supporters, and that will likely be forever (especially with their athletic program going so well), the Flexner report will be controversial. Since the medical schools at the University of North Carolina and Wake Forest College were dealt with more kindly, the report would merely be called interesting or keen by supporters of those institutions. Whatever one's own affiliations and sentiments, Mr. Noah's paper should provide some interesting information, particularly to that large group of physicians who have heard about the Flexner Report for years but have never read it—which happens all too often with controversial reports. Flexner's is interesting reading, and is recommended to those stimulated by the Noah excerpts.

* * *

LEAD POISONING

Concern is currently being expressed over the increasing amounts of lead which are being found in the air we breathe. Presumably this lead comes from automobile exhausts. If we had big urban areas with slums where children could eat lead paint, we might see occasional cases of classic systemic lead poisoning; since our slum dwellings are mostly unpainted, we have not had that problem. Most of the obvious lead poisoning we see here in North Carolina is of the focal kind, leaving a single .38 calibre hole or multiple size 7½ shot holes.

Now it would seem that we should be on the lookout for the lead line, and the signs of hemolytic anemia which characterize systemic lead poisoning. One other action we might take is to invest in the stock of the gasoline company whose product contains no lead; the Great Society may legislate a demand for this product.

* * *

THE MEDICINE BAG

Indian medicine has been chiefly studied in western Indian tribes, whose glamorous headdress seems to be necessary for our own Cherokee citizens to attract tourists. However, North Carolina Indians of all tribes had their medical practices, as does every social group ever discovered. At least one previous JOURNAL paper (Somers, J. E.: Folk Medicine in an Isolated Modern Community," vol. 22: 611-615, Dec. 1961) dealt with home remedies among the Cherokee Indians of North Carolina. Dr. Warner Wells contributed to an article on Indian medicine in *Community Health* a few years ago. Now the practices of an eastern Indian group are dealt with by Mr. Allen, whose paper calls attention to the interesting and puzzling matters that come to light in such excavations. No matter where we live in the state, some archaeologic activity is reasonably close, and an interested physician could no doubt make a contribution to such a study with his special knowledge. At the very least he can learn a lot himself.

* * *

GOING TO HELL WITH A COCKTAIL PUMP

A device that falls into the category of "something for him who has everything" is now on the market, in the form of a battery-operated cocktail pump. Immersed in a pitcher of cocktails it will pump "up to a half gallon a minute," surely enough to slake even the thirst of a W. C. Fields, at least until the battery or the booze gives out. One can conceive of such a device as an aid to the disabled, and in a sense, the people who use it are at least temporarily disabled. Unable any longer to lift the pitcher without spilling the contents, they can reach for the pump and be back in business while keeping the rug unsoiled. Surely the Romans, with their vomitoriums, had no more conspicuous symbol of decadence, which Baudelaire defined as "the consuming in flames of races exhausted by their capacity for sensation." Its appearance in a medical publication gives one pause; maybe the editors found it as amusing as we do. Maybe the makers intended it as a spoof—we hope so.

The President's Page

THE PREVAILING FEE CONCEPT

More and more the service physicians provide is considered a marketable or a consumer's product. The demand for these services will be ever increasing. It is inevitable that sooner or later quality medical care will be expected by the entire population as a part of their God-given right. At this stage, however, organized medicine, in the respective states, has the opportunity to guide the development of the provision of these services. Since those over 65 years of age now have a prepaid mechanism for much of their medical care, it appears that the medical profession has a responsibility to the people it serves to make available to them our services for a predetermined, prestated, customary, and reasonable charge. This can be accomplished by the Blue Shield prepaid mechanism directly guided by, and responsible to the medical profession.

The October issue of *The Blue Shield* gives an outline concerning the Prevailing Fee concept which appears to merit our consideration. I want to pass the mechanism of its operation on to our membership.

The National Association of Blue Shield Plans has developed a new concept in fee-scheduling, called "Prevailing Fees." This was done in response to market demands of major purchasers for more adequate, predictable medical-surgical benefits. In order to provide a program more acceptable generally to the major purchasers of health coverage and their employees, as well as to the providers of service, the National Association of Blue Shield Plans carried out extensive cost studies and interviews with the principals who would be involved.

To assure members that the cost of health care benefits they receive will be "paid in full" by their Blue Shield coverage, it was necessary to devise a program where payments to physicians would be related to fees physicians are known to be charging their patients.

In this Prevailing Fees Program, the physicians, in effect, set their own fees. They report their usual charges to the local Blue Shield Plan, and from these reports the Plan develops a profile of charges for *each* physician and then computes the levels of prevailing charges to include approximately 90 per cent of the physicians in each economic area. This gives consideration to the Fifth Avenue doctor and his costly office maintenance, as well as the relatively inexpensive costs encountered by a Garland physician.

The physician profiles are composed of each physician's usual fees for every procedure which comprises any significant portion of his practice. This program is based on the premise that each physician has a fee for each procedure which does not vary from patient to patient except for the obvious exceptions which are to be found among the higher and lower income brackets.

By analyzing the individual profiles in terms of economic areas, it is possible to achieve community charge levels which accurately reflect the local practice of medicine; and to ascertain at which point the fees of 90 per cent of the physicians in the area would be covered. By collecting fee information from doctors on only those procedures which make up the bulk of his practice, the unique charging patterns of specialty physicians are reflected.

While the program permits the physician latitude in establishing his charges, it also meets the costs known to represent the charges of at least 90 per cent of the medical community. The number of physicians whose charges would exceed those of 90 per cent of their colleagues is quite small. Physicians whose charges fall in the 90 per cent range are offered participation certificates. They are paid their usual charges as filed with the Plan and agree in writing to accept them as payment in full for services rendered Blue Shield members. These participating physicians are paid directly, while services performed by non-participating physicians are an indemnity reflecting the predetermined average value for the service or procedure rendered.

The Prevailing Fees program—while pro-

viding "paid in full" benefits—is not based on a fixed fee schedule which every physician is required to accept regardless of its applicability to his practice of charging patients.

Physicians can take the initiative to change fees. Requests for fee increase are approved if the increased fees are still within the current 90 percentile limit of actual charges, and the physician is charging the same amount to all his patients for similar procedures or services.

Provisions are made for a physician to request additional compensation from Blue Shield by filing a special report with his claim. Provisions are also made for a review of claims, usually in cooperation with the local medical society, when unusual circumstances require that a physician's fee exceeds his normal charge. The cooperation of the Society is also solicited to adjudicate any differences which might arise.

Here in North Carolina it is planned, with the approval of the Executive Council of the Medical Society, to make an in-depth survey to support a Blue Shield Plan in developing a program by determining a range of prevailing fees for several of our geographic areas. This would guarantee that Plan payments for medical services will be related to the various economic characteristics of the area which is served by the Plan.

And now completely irrelevant to Prevailing Fees, but certainly related to the Season of the year, I wish for each of you every joy of Christmas and a New Year of health, happiness, and peace.

George W. Paschal, Jr., M.D.
President

Bulletin Board

COMING MEETINGS

Conference of County Society Officers and Committeemen—Carolina Hotel, Pinehurst, January 28-29, 1966.

Watts Symposium—Watts Hospital, Durham, February 18-19.

North Carolina Mental Health Association, Annual Meeting—Queen Charlotte Hotel, March 3-4, 1966.

Duke University School of Medicine and the American Academy of Orthopaedic Surgeons, Postgraduate Cruise Course on Fractures and Other Injuries—MS Europa from New York, March 14, 1966; West Indies.

North Carolina Heart Association, 17th Annual Meeting—Jack Tar Hotel, Durham, May 18-19, 1966.

New Members of the State Society

Drs. Richard Killian Cureton, R, U. S. Naval Hospital, Camp Lejeune; Arthur Eugene Douglas, Jr., P, 3303 Floyd Ave., Lumberton; William Chivous Bostic, III, Or, 1900 S. Hawthorne Road, Winston-Salem; Joseph Boyles Dudley, Path, 631 Windermere Circle, Winston-Salem; Joe Badgett Currin, Jr., I, Fuquay-Varina; Thomas Terry Thompson, OP, 609 E. Academy St., Cherryville; David John Deas, P, 3016 Imperial Drive, Gastonia;

Drs. Clendall Lee King, Or, N. C. Orthopaedic Hospital, Gastonia; Robert Hadley Greene, GP, 235 S. Brevard St., Charlotte; Donald Forrest Little, ObG, 1330 S. Kings Drive, Charlotte, 28207; Kenneth Paul Carlson, U, 3108 Buena Vista Road, Winston-Salem; John Kirby Farrington, ObG, 318 Westwood Ave., High Point; James Avery Finger, PH, 520 Hearthside Drive, Winston-Salem; Ernest Robert Neely, Pd, 193 Pennsylvania Ave., Winston-Salem.

News Notes from the Bowman Gray School of Medicine of Wake Forest College

Mrs. Ethel M. Nash, assistant professor of preventive medicine at the Bowman Gray School of Medicine, is the new president of the American Association of Marriage Counselors.

She was installed October 30 at the twenty-third annual meeting of the organization in Detroit, Michigan.

Mrs. Nash, who was elected president-elect last year, is the association's first president from North Carolina. She succeeded Dr. Aaron L. Rutledge of Detroit, Michigan.

A family life specialist at the Bowman Gray School of Medicine since 1956, she is the senior editor of a book on "Marriage Counseling in Medical Practice" and has served on the Board of Directors of the National Council on Family Relations.

* * *

Howard R. Hall, former director of development at Vanderbilt University Medical Center, has been appointed director of development for the Bowman Gray School of Medicine and North Carolina Baptist Hospital.

In his new position, Hall will direct the medical center's fund raising activities in a long-range

program for the development of physical facilities and endowment support. He also will have administrative responsibilities in the area of alumni affairs and will be coordinator of the medical center public relations program.

A $20-million physical expansion project of the medical center expansion program is now in the final planning stages. The construction of facilities, which will increase the size of the center by 80 per cent, is scheduled to begin next summer and to be completed in 1970.

Endowment goals of the medical center development program have been set at $15 million for the medical school and $6 million for the hospital and paramedical school. The medical school's endowment needs are included in the long-range university plan of Wake Forest College.

Hall, a graduate of the University of Chattanooga, is a former general assignment reporter and picture editor with the Chattanooga Times. He joined the staff of Vanderbilt University Medical Center in 1957 as public information officer and was later named assistant to the director for medical affairs. For the past six years he has served as director of development.

* * *

Dr. Edwin H. Martinat, assistant professor of orthopedics and assistant professor of physical medicine and rehabilitation, was installed as president of the North Carolina Rehabilitation Association October 15 at a meeting of the organization in Wrightsville Beach.

* * *

George C. Lynch, professor and director of the Department of Medical Illustration, is the winner of one of three awards presented by the Association of Medical Illustrators. He won the award for an exhibit on medical illustrations, presented at the annual meeting of the association in Philadelphia. He has served for the past year as chairman of the association's Board of Governors.

* * *

Roger E. Stevenson, senior medical student at the Bowman Gray School of Medicine, has been awarded a $1,000 scholarship, made available by the Pfizer Laboratories Division, Charles Pfizer and Co. The recipient was chosen on the basis of scholastic achievement and financial need.

* * *

Dr. Clark E. Vincent, professor of sociology and outgoing president of the National Council on Family Relations, delivered the presidential address October 23 at the annual meeting of the council in Toronto, Canada. He spoke on "Familia Spongia: The Adaptive Function."

Dr. Eugene B. Linton, assistant professor of obstetrics and gynecology, was keynote speaker for the meeting. His topic was "Current Concepts of the Physician's Role in Marriage and Family Health." Mrs. Ethel M. Nash, assistant professor of preventive medicine, was discussant for a paper on "The Marriage Counselor in the Physician's Office."

* * *

Three members of the Bowman Gray faculty participated on the program for the fifty-ninth annual meeting of the Southern Medical Association November 1-4 in Houston, Texas.

Dr. Eugene B. Linton, assistant professor of obstetrics and gynecology, presented a paper on "The Role of the Obstetrician and Gynecologist in Community Life Education." Dr. Clair E. Cox, instructor in urology, spoke on "Bacterial Flora of the Female Urethra."

Dr. David Cayer, professor of clinical medicine was moderator for a panel discussion on "Liver Disease in Pregnancy." Dr. Sushil S. Lacy, assistant resident in urology, presented a film on "Dilation of the Pyloric Sphincter and Duodenum."

Darrell P. Thorpe, senior student from Flint, Michigan, was selected by his classmates to attend the meeting as the student representative of the medical school.

* * *

Dr. James F. Toole, professor and chairman of the Department of Neurology, called for unity among vascular specialists as he presented the George E. Brown Memorial Lecture at the thirty-eighth annual Scientific Sessions of the American Heart Association in Bal Harbour, Florida.

Speaking on "Interarterial Shunts in the Cerebral Circulation," he urged vascular researchers to give attention to the total circulatory system. "We've got to put the vascular system back together again and break down our artificial divisions of interest," he said, "if we are to realize the aims of our work."

Other members of the Bowman Gray faculty who participated in the program were Drs. Margaret C. Conrad, assistant professor of physiology; Harold D. Green, professor and chairman of the Department of Physiology, who was co-chairman for a session on "Regional Circulation" and was moderator for a cardiovascular conference; J. Maxwell Little, professor and chairman of the Department of Pharmacology, who served as discussant in the assembly group discussion on research; and J. Rupert Ravens, assistant professor of pathology, who presented an exhibit on "Pathology of the Common Vascular Disease."

* * *

Dr. Hugh B. Lofland Jr., associate professor of biochemistry, presented a paper on "Metabolic Patterns of Atheromatous Pigeon Aortae" at the nineteenth annual meeting of the Council on Arteriosclerosis of the American Heart Association and the American Society for the Study of Arteriosclerosis in Bal Harbour, Florida.

* * *

Dr. Eben Alexander, professor of neurosurgery, and Dr. Mark Wigser, resident in neurosurgery, presented papers at a meeting of the American Academy of Neurological Surgery October 14-16



(mepenzolate bromide)

helps restore normal motility and tone

Cantil (mepenzolate bromide) works in the colon. In irritable colon, spastic colon, ulcerative colitis and other functional and organic colonic disorders, it acts to:

- control diarrhea/constipation
- relieve spasm, cramping, bloating
- make patients more comfortable

with little effect on stomach, bladder or other viscera.

"In 40 of 44 cases of irritable or spastic colon, Cantil [mepenzolate bromide] or Cantil with Phenobarbital reduced or abolished abdominal pain, diarrhea and distention and promoted restoration of normal bowel function . . . Cantil [mepenzolate bromide] proved to be singularly free of anticholinergic side-effects. Blurring of vision or dryness of the mouth were occasionally seen and were usually managed with a reduction in dosage. Urinary retention, noted in two cases was eliminated in one by reducing dosage."[1]

IN BRIEF:

One or two tablets three times a day and one or two at bedtime usually provide prompt relief. Cantil with Phenobarbital may be prescribed if sedation is required.

Dryness of the mouth or blurring of vision may occur but it is usually mild and transitory. Urinary retention is rare. Caution should be observed in prostatic hypertrophy—withhold in glaucoma. Cantil with Phenobarbital is contraindicated in patients sensitive to phenobarbital.

Supplied: CANTIL (mepenzolate bromide)—25 mg. per scored tablet. Bottles of 100 and 250.

CANTIL with PHENOBARBITAL—containing in each scored tablet 16 mg. phenobarbital (warning: may be habit forming) and 25 mg. mepenzolate bromide. Bottles of 100 and 250.

1-Riese, J.A.: Amer. J. Gastroent. 28:541 (Nov.) 1957

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in Cincinnati, Ohio. Dr. Alexander spoke on "Fracture Dislocation of the Cervical Spine, C2-C7." Dr. Wigser's paper was entitled "Bilateral Extracranial Aneurysms of the Internal Carotid Artery."

* * *

Three from the Department of Obstetrics and Gynecology of the Bowman Gray School of Medicine participated in the District IV meeting of the American College of Obstetricians and Gynecologists in Norfolk, Virginia.

Dr. Frank R. Lock, professor and chairman of the department, was moderator of a panel discussion on "Marriage Counseling in Medical Practice." He is the immediate past president of the American College of Obstetricians and Gynecologists. Dr. Richard L. Burt, professor of obstetrics and gynecology, and Dr. A. Bert Pruitt, resident in obstetrics and gynecology, presented a paper on "Observations on Metabolic Activity of a Human Placental Fraction."

* * *

Dr. George S. Malindzak Jr., assistant professor of physiology, presented a paper on "Arterial Pressure Pulse Transmission" during a recent Physiology and Biochemical Engineering Seminar at the University of Nebraska College of Medicine in Omaha, Nebraska.

* * *

Two members of the Bowman Gray faculty participated in the American College of Surgeons' annual Clinical Congress held October 18-22 in Atlantic City. Dr. Jesse H. Meredith, associate professor of surgery, presented a paper on "Relationship of Serum Electrolytes to Bowel Motility." Dr. Eben Alexander, professor of neurosurgery, headed a panel discussion on "Diagnosis and Treatment of Congenital Defects of the Central Nervous System."

* * *

Dr. Richard C. Proctor, professor and chairman of the Department of Psychiatry, spoke on "The Emerging Picture of Occupational Psychiatry in the South" at a meeting of the Southern Psychiatric Association in Ponte Vedra Beach, Florida. He is a past president of the association.

* * *

Dr. R. Winston Roberts, professor of ophthalmology, presented three papers at the Omaha Midwest Clinical Society Congress in Omaha, Nebraska. He spoke on "The Non-Ophthalmologist's Responsibility in Glaucoma;" "Hypophyseal Surgery in Treatment of Diabetic Retinopathy;" and "Interesting Fundus Manifestations of Systemic Diseases."

* * *

Dr. Frederick L. Thurstone, assistant professor and director of the Department of Biomedical Engineering, presented a paper on "Ultrasonic Ranging in Biologic Tissue" at a recent Engineering and Medical Seminar at the University of Nebraska College of Engineering, Lincoln, Nebraska.

News Notes from the University of North Carolina School of Medicine

A fund for teaching and research at the University of North Carolina School of Medicine will honor a retiring department chairman.

The Robert A. Ross Obstetrical and Gynecological Society, organized earlier this year, has reached two-thirds of its goal for setting up a chair in honor of Dr. Robert A. Ross, chairman of the UNC Department of Obstetrics and Gynecology since 1952. He is retiring as chairman to return to teaching and research here.

The 70-member society elected Dr. John A. Kirkland of Wilson as its first president. Other officers are Dr. Arthur R. Summerlin of Raleigh, vice president and president-elect, and Dr. William E. Easterling of Chapel Hill, secretary-treasurer.

Dr. Hugh M. Shingleton of Chapel Hill is in charge of the fund-raising activities.

Dr. Ross is a native of Morganton and was a member of the Duke University medical faculty for 22 years before coming to UNC as department chairman.

* * *

Dr. Paul L. Munson, a pharmacologist at the Harvard University School of Dental Medicine since 1950, has become chairman of the Department of Pharmacology at the University of North Carolina School of Medicine.

He succeeds Dr. Thomas C. Butler, who has become director of a pharmacology and toxicology research and training center to be established here with the aid of a $17 million federal grant.

Dr. Munson, professor of pharmacology at Harvard since 1963, will continue as lecturer in pharmacology there until June 30 while serving as department chairman at UNC.

Dr. Munson is a native of Washta, Iowa. He is a graduate of Antioch College in Yellow Springs, Ohio, the University of Wisconsin, and received his doctorate (Ph. D.) from the University of Chicago. He holds an honorary master of arts degrees from Harvard.

He is a former research biochemist and head of an endocrinology research section in industry and for two years before going to Harvard was engaged in pharmacological research at Yale University.

* * *

An anatomy professor now writing a book for the U. S. Atomic Energy Commission about the effects of fallout on the human body was a speaker at an environmental health seminar in Chapel Hill recently.

Dr. Charles D. Van Cleave of the UNC medical faculty spoke on "Late Somatic Effects of Radiation." He published a book two years ago, under AEC auspices, on "Irradiation and the Nervous System."



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Dactilase provides comprehensive therapy for a wide range of digestive disorders. Its antispasmodic and anesthetic actions rapidly relieve pain and spasm. Dactilase decreases hypermotility without inducing stasis. In addition, it supplies digestive enzymes to help reduce bloating, belching and flatulence. Dactilase does not interfere with normal digestive secretions. Very often it can be a most useful answer to the dyspeptic's needs.

DACTILASE: Each tablet contains: Dactil® (piperidolate hydrochloride), 50 mg.; Standardized cellulolytic* enzyme, 2 mg.; Standardized amylolytic enzyme, 15 mg.; Standardized proteolytic enzyme, 10 mg.; Pancreatin 3X** (source of lipolytic activity), 100 mg.; Taurocholic acid, 15 mg.

*Need in human nutrition not established. **As acid resistant granules equivalent in activity to 300 mg. Pancreatin N.F.

Side Effects and Contraindications: DACTILASE is almost entirely free of side effects. However, it should be withheld in glaucoma and in jaundice due to complete biliary obstruction.

Administration and Dosage: One tablet with, or immediately following each meal. Tablets should be swallowed whole.

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The sweet pea has yielded a highly poisonous drug being used experimentally at the University of North Carolina School of Medicine to treat stiffness in the joints of experimental animals.

The promising results of the experiments were reported in Atlantic City, recently at the American College of Surgeons by Dr. Erle E. Peacock, Jr., UNC surgeon, and Dr. Leonard Furlow, formerly at UNC and now at the University of Florida.

The powerful sweet pea drug, Beta-amino propionitrile, has prevented joint stiffness in animals when administered while a knee joint is immobilized with a cast or splint. The drug also seems to relieve stiffness when given after a splint or cast is removed from a knee joint.

In addition to his scientific report on the drug treatment of stiff knees, Dr. Peacock summarized the progress of organ transplantation in a talk entitled "What's New in Surgery."

* * *

The division of Child Psychiatry at N. C. Memorial Hospital here has developed a program for teaching and studying severely disturbed children. Dr. Eric Schopler, director of research in child psychiatry, has been involved with both aspects of this program, as principal investigator under a $23,000 grant from the National Institute of Mental Health.

"Our group of severely disturbed children is characterized by various limitations in their relationship to the real world," says Dr. Schopler. "We have a two-way commitment to these children, (1.) to develop and use the most effective methods at our disposal for reducing and overcoming their psychological handicaps; (2.) to conduct basic research on the psychopathology which may not have immediate practical application."

* * *

Dr. Robert R. Cadmus, chairman of the Department of Hospital Administration, was a member of the guest faculty for a hospital staff conference recently at the University of Colorado School of Medicine.

The week-long postgraduate course for physicians and hospital administrators from 45 states was held at Estes Park, Colorado.

Dr. Cadmus discussed medical staff by-laws, rules, and regulations and participated in a panel on medical staff organization.

* * *

Sensible living and periodic physical checkups were prescribed recently for the prevention of long-lasting and disabling diesases.

Dr. Robert R. Huntley, a specialist in preventive and internal medicine at the University of North Carolina School of Medicine, told a meeting of the State Rural Health Conference that sensible living means "particularly the avoidance of excessive smoking and eating, driving automobiles after drinking and obtaining regular daily physical exercise."

As for physical examinations he said that a person's family doctor is in an ideal position to pick up chronic disease symptoms early when treatment can be most effective.

"Going to the medical center for an occasional checkup is a very poor substitute for a periodic going-over by one's own doctor," Dr. Huntley said.

* * *

How important is an unborn baby's contribution to the intricate chemical process going on in the mother's body during pregnancy? Does an expectant mother with a complicated pregnancy fail to excrete certain steroid hormones because her unborn baby isn't able to do its part in the chemical process?

To seek answers to these and similar questions about pregnancy problems, the National Institute of Child Health and Human Development has approved a $40,000 grant at the UNC School of Medicine.

Co-investigators for the three-year research project are Dr. William E. Easterling, Jr., and Dr. Luther M. Talbert, UNC obstetricians.

* * *

Healthy females probably start growing old much later in life than healthy males, a University of North Carolina health scientist believes.

Why? Because "liquid crystals" begin piling up in the bloodstream in females later than in males.

Dr. Gordon T. Stewart, pathologist and epidemiologist on the UNC medical and public health faculties, thinks the aging process may start when certain fats in liquid crystalline form begin to increase in the bloodstream.

Liquid crystals occur in lipoproteins in the blood plasma. They are compact like solids but mobile like liquids. Dr. Stewart refers to the crystals as "an unfamiliar fourth state of matter, a middle phase between a solid and a liquid." His research suggests that liquid crystals are scarce or absent in a healthy person until adult life.

* * *

The technique for physically examining patients generally is underrated, says the new revised version of "The Examination of Patients."

The manual presents methods for examining patients taught at the UNC School of Medicine. Methods of physical examination have been expanded in the new manual, but emphasis again is upon interviewing the patient—history taking.

"Despite advanced technology and prolific gadgetry," the manual states, "the able clinician will still obtain most of his useful diagnostic information from a careful history and physical examination."

The 129-page manual was compiled by the UNC faculty under the chairmanship of Dr. Christopher C. Fordham, associate professor of medicine.

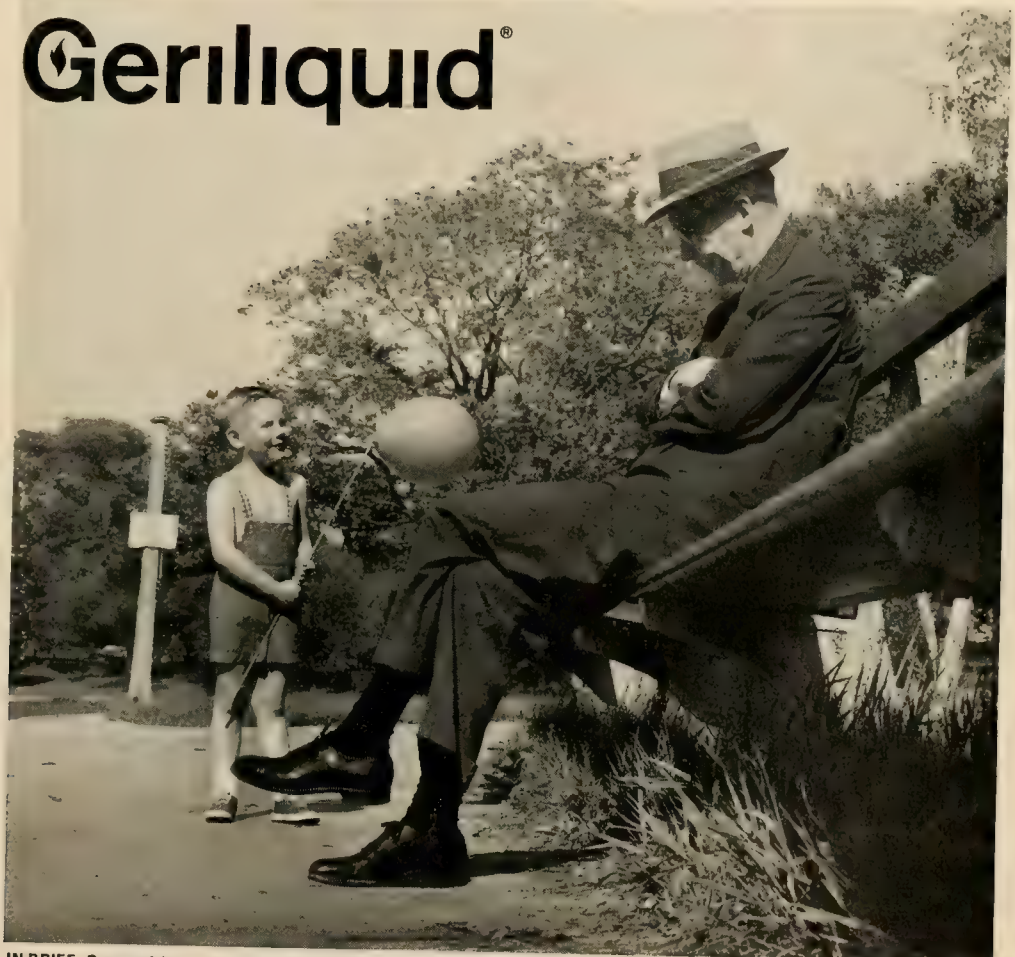
It is designed for the practicing physician, the

when even southern sun fails to warm cold hands and feet

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GERILIQUID warms cold hands and feet through the thermogenic action of glycine and through sustained vasodilation by glycine and niacin. In addition, in patients with impaired peripheral circulation, GERILIQUID increases the ability to walk farther with less pain. Patients particularly like the palatable, sherry wine base.

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IN BRIEF: Composition: Each 5 ml. contains: niacin 75 mg. and aminoacetic acid (glycine) 750 mg. in a palatable sherry wine base; alcohol 5%.
Side Effects: Occasional lightheadedness or transient itching which may disappear with continued use. There are no known contraindications; however, caution is advised when there is concomitant administration of a coronary vasodilator.
Administration and Dosage: One or two teaspoonfuls 3 times a day before meals. If flushing is objectionable, dosage may be lowered. However, tolerance to flushing usually develops without loss of efficacy in regard to vasodilation.
Supplied: Bottles of 8 oz. and 16 oz.

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medical student and the house officer interested in a descriptive "how to" for examining patients.

* * *

Fifty-seven sets of twins will be studied in an extensive effort to fathom the mysteries of schizophrenia, the major cause of severe mental illness in the United States today.

The National Institute of Mental Health has awarded $46,236 to Dr. Irving I. Gottesman, psychologist in the Department of Psychiatry at the University of North Carolina School of Medicine, for a three-year study of "The Twins of Schizophrenics."

Dr. Gottesman is using a unique sample of all twins admitted to Maudsley Hospital in London, England, with a diagnosis of schizophrenia during a 16-year period.

The major purpose of the research is to find cut the mental status of each of the brothers or sisters of the hospitalized twins.

* * *

A technique aimed at learning more about why some people are naturally immune to certain diseases was explained by a UNC bacteriologist at an international meeting in Germany in October.

Dr. John K. Spitznagel of the UNC medical faculty addressed the Second International Symposium for the Application of Radioactive Isotopes in Tuberculosis Research. The meeting was at the Institute for Experimental Biology and Medicine near Hamburg.

News Notes from the Duke University Medical Center

Officials of the Duke University Medical Center have announced a three-year, $28.8-million expansion program to help meet what they called a "critical" need for more doctors, nurses, and medical-care facilities.

The project will provide:

—A 60% increase in the number of doctors trained in the Duke School of Medicine, a rise in capacity from 320 to 512 medical students.

—A 60% increase in the number of nursing students, primarily at the graduate training level.

—A significant increase in the training capacity for other health-related professions.

—An increase in the size of Duke Hospital to 1,000 beds, the largest in North Carolina. The hospital expansion will include a minimal care unit, a modern weapon to reduce hospital costs for patients who are largely able to look after themselves.

Duke officials also have adopted the concept of specialized structures such as a facility designed for care of the chronically ill, and nursing home units.

The expansion program is expected to be completed by 1970. Construction of some of the buildings will get under way within a few months.

Features of the medical center improvement program will include:

—Construction of a building for medical and nursing teaching and administration.

—Construction of a basic sciences building which will provide space for the departments of physiology and pharmacology, biochemistry, and genetics.

Construction of a new medical library which will have a capacity of about 300,000 volumes, compared to the present library capacity of 50,000 volumes, and will insure easy accessibility to medical information despite the current explosion of medical knowledge.

—Construction of a new hospital within the new medical complex, initially to contain 128 patient beds but designed for ultimate expansion to 400 beds.

—Construction of a new clinical research unit which will include a new hyperbaric oxygenation unit.

—Construction of an addition to the Duke Private Diagnostic Clinic and a new hospital chapel, and renovation of some existing hospital areas.

* * *

A team of 29 physicians and their wives left Durham in October for seven different foreign countries where they will live and work under an experimental Peace Corps program.

The team had undergone Peace Corps preparatory training since mid-July under the direction of a joint Duke University-University of North Carolina staff. Before their departure they were honored by the two universities at a farewell dinner on the Duke University campus.

Duke University hosts were Dr. R. Taylor Cole, provost; Dr. William G. Anlyan, medical school dean; and Dr. William DeMaria, Peace Corps project director.

Attending from the University of North Carolina were Dr. Isaac Taylor, dean of the school of medicine, and Dr. W. Fred Mayes, dean of the School of Public Health. Also attending were the combined Duke-UNC Peace Corps project staff.

Most members of the Peace Corps group are general practitioners. One is a urologist, another is a pediatrician, one is a specialist in obstetrics and gynecology, and a fourth is a public health officer.

Wives are nurses, biochemists, laboratory technicians, social workers, and teachers. Six of the 14 families have two or more children who have also been receiving special training for the countries to which they will be going.

* * *

Cholesterol was closely linked to the development of strokes by a research group from the Duke University Medical Center and the Veterans Administration at Durham in a paper presented at the annual meeting of the American Heart Association in October.

WHEN MOTHER'S IRON ISN'T UP TO MOTHERHOOD

IN BRIEF: **ACTIONS AND USES:** A single dose of Imferon (iron dextran injection) will measurably begin to raise hemoglobin and a complete course of therapy will effectively rebuild iron reserves. The drug is indicated only for specifically-diagnosed cases of iron deficiency anemia and then only when oral administration of iron is ineffective or impractical. Such iron deficiency anemia may include: patients in the last trimester of pregnancy; patients with gastrointestinal disease or those recovering from gastrointestinal surgery; patients with chronic bleeding with continual and extensive iron losses not rapidly replenishable with oral iron; patients intolerant of blood transfusion *as a source of iron;* infants with hypochromic anemia; patients who cannot be relied upon to take oral iron.

COMPOSITION: Imferon (iron dextran injection) is a well-tolerated solution of iron dextran complex providing an equivalent of 50 mg. of elemental iron in each cc. The solution contains 0.9% sodium chloride and has a pH of 5.2-6.0. The 10 cc. vial contains 0.5% phenol as a preservative.

ADMINISTRATION AND DOSAGE: Dosage, based upon body weight and Gm. Hb./100 cc. of blood, ranges from 0.5 cc. in infants to 5.0 cc. in adults, daily, every other day, or weekly. The total iron requirement for the individual patient is readily obtainable from the dosage chart in the package insert. Deep intramuscular injection in the upper outer quadrant of the buttock, using a Z-track technique, (with displacement of the skin laterally prior to injection), insures absorption and will help avoid staining of the skin. A 2-inch needle is recommended for the adult of average size.

SIDE EFFECTS: Local and systemic side effects are few. Staining of the skin may occur. Excessive dosage, beyond the calculated need, may cause hemosiderosis. Although allergic or anaphylactoid reactions are not common, occasional severe reactions have been observed, including three fatal reactions which may have been due to Imferon (iron dextran injection). Urticaria, arthralgia, lymphadenopathy, nausea, headache, and fever have occasionally been reported. Initial test doses of 0.5 cc. are advisable.

PRECAUTIONS: If sensitivity to test doses is manifested, the drug should not be given. Imferon (iron dextran injection) must be administered by deep intramuscular injection only. Inject only in the upper outer quadrant of the buttock, not in the arm or other exposed area.

CONTRAINDICATIONS: Imferon (iron dextran injection) is contraindicated in patients sensitive to iron dextran complex. Since its use is intended for the treatment of iron deficiency anemia only, it is contraindicated in other anemias.

CARCINOGENICITY POTENTIAL: Using relatively massive doses, Imferon (iron dextran injection) has been shown to produce sarcoma in rats, mice and rabbits and possibly in hamsters, but not in guinea pigs. The risk of carcinogenesis, if any in man, following recommended therapy with Imferon (iron dextran injection) appears to be extremely small.

SUPPLIED: 2 cc. ampuls, boxes of 10; 5 cc. ampuls, boxes of 4; 10 cc. multiple dose vials.

in iron deficiency anemia for rapid and predictable replacement of iron reserves

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(iron dextran injection)



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The research team reported on a study of 771 men from 39 VA hospitals across the country.

All of the patients were recent victims of heart attacks or strokes. As a group, they had at least one thing in common—significant elevation in the level of blood cholesterol.

The research team was headed by Dr. Albert Heyman, professor of neurology at Duke. Associated with him were Dr. Samuel J. Eriedburg, Duke Medical Center, Dr. Joseph E. LeBauer, until recently a Duke resident and now with Georgetown University Hospital, Washington; and Dr. Dean Nefzger and Julian Lewis of Washington.

They noted that there appeared to be little or no geographical or racial variations in cholesterol levels, a finding they termed "significant in view of the current interest in the relation of dietary, emotional, and environmental stresses on cholesterol values."

* * *

Dr. Ewald W. Busse, professor and chairman of the Department of Psychiatry, recently announced that Charles W. Neville, Jr., M.D., an assistant professor of psychiatry, has been appointed medical director of Highland Hospital, a private psychiatric hospital in Asheville which is owned by Duke University.

Although geographically separated from Duke, Highland Hospital will operate as a Division of the Department of Psychiatry of the Duke University Medical Center, with clinical, teaching, and research facilities complementing those at Duke. Clinically, Highland Hospital is especially well equipped to handle psychiatric cases in which protracted care and removal from the home situation is indicated.

News Notes from the North Carolina Heart Association

Dr. J. Maxwell Little, professor and chairman of the Department of Pharmacology at the Bowman Gray School of Medicine, Winston-Salem, has been appointed 1966 chairman of the North Carolina Heart Association's research committee. The appointment was made by Hargrove Bowles, Jr., Greensboro, chairman of the heart group's board of directors.

Dr. Little succeeds Dr. A. Robert Cordell, also of Bowman Gray.

Newly named members of the research committee are Drs. William W. McLendon, Greensboro; A. Robert Cordell and Herman E. Schmid, Jr., Winston-Salem; J. Logan Irvin and James W. Woods, Chapel Hill; Marvin M. McCall II, Charlotte; Madison S. Spach and Robert E. Whalen, Durham.

* * *

Andy Griffith has been named North Carolina's Honorary Heart Fund Chairman for 1966, according to an announcement by William C. Friday, president of the University of North Carolina.

Friday, chairman of the North Carolina Heart Association's fund-raising efforts next February, said the well-known actor and UNC alumnus will assist in radio and television promotion of the forthcoming Tar Heel drive to raise funds for the Heart Association's research, education, and community service programs.

American College of Physicians

The American College of Physicians held a regional meeting for internal medicine specialists in North Carolina on December 9, in Chapel Hill.

The meeting was held at the University of North Carolina, with scientific sessions taking place in the auditorium of the school of medicine.

In addition to scientific presentations, the meeting included a banquet honoring the fiftieth anniversary of the founding of the American College of Physicians and the anniversary of the College's first regional scientific meeting held in North Carolina in 1933.

The meeting was under the general direction of Dr. Monroe T. Gilmour of Charlotte, ACP Governor for North Carolina.

Dr. Isaac M. Taylor of Chapel Hill, was chairman of the Arrangements Committee, and Dr. Joseph B. Stevens of Greensboro was chairman of the Program Committee.

Hospital Saving Association

The appointment of three vice presidents of Hospital Saving Association was announced recently by J. C. Eagles, Jr., president of the Association. They are John Alexander McMahon, former general counsel and secretary-treasurer of the North Carolina Association of County Commissioners, who was appointed vice president of Special Development; Rogers C. Wade, former secretary-treasurer of Hospital Saving Association, who is now Vice President, Internal Operations; and E. H. Leng, former sales director, who was designated vice president, Sales.

American Medical Association

A sample agreement for the operation of a hospital emergency department by a partnership of physicians on the medical staff has been prepared by the American Medical Association.

Developed by AMA's Law Department in cooperation with the Department of Hospitals and Medical Facilities, the sample contract was prepared in response to numerous requests for assistance from hospital medical staffs that have found it difficult to provide staffing through voluntary arrangements.

a rapid lift from the hell of depression



Doré Illustration
from
Dante's Inferno

often relieves mental pain in 2-5 days

NORPRAMIN®
(desipramine hydrochloride)

Norpramin is a rapid-acting specific drug for the treatment of depression. Depressive signs and symptoms—sometimes described as "mental pain"—typically begin to improve in 2-5 days. Patients are more hopeful, less empty and less weighed down by their troubles. Norpramin has only slight sedative qualities, nevertheless anxiety *secondary to depression* is frequently relieved as depression is lifted. If anxiety or tension persists it can be controlled by adding a tranquilizer or by reducing dosage. Norpramin is not a MAO inhibitor. Side effects are usually mild.

DOSAGE AND ADMINISTRATION

Optimal results are obtained at a dosage of about 150 mg./day—two 25 mg. tablets t.i.d. After achieving optimal results, a maintenance dose (50-100 mg./day) should be sought.

LAKESIDE LABORATORIES, INC. Milwaukee, Wisconsin 53201

IN BRIEF:

Indications: In depression of any kind—neurotic and psychotic depressive reactions; manic-depressive or involutional psychotic reactions.

Contraindications and Precautions: Glaucoma, urethral or ureteral spasm, recent myocardial infarction, severe coronary heart disease and epilepsy. Should not be given within two weeks of treatment with a monoamine oxidase inhibitor. Safety in human pregnancy has not been established.

Adverse Effects: Side effects, usually mild, may include: dry mouth, constipation, dizziness, palpitation, delayed urination, "bad taste," sensory illusion, tinnitus, agitation and stimulation, sweating, drowsiness, headache, orthostatic hypotension, flushing, nausea, cramps, weakness, blurred vision and mydriasis, rash, allergy, transient eosinophilia, granulopenia, altered liver function, ataxia and extrapyramidal signs.

Supplied: Norpramin (desipramine hydrochloride) tablets of 25 mg., in bottles of 50, 500 and 1000.

The sample agreement calls for the partnership to provide the services of a duly licensed physician in the emergency department on a continuous, uninterrupted basis, 24 hours each day, seven days each week.

Responsibilities of the hospital to provide adequate space, equipment and supplies, maintenance, and nursing and other nonphysician services are set forth.

Members of the partnership and its physician-employees would be prohibited from maintaining a private office within a specified radius of the hospital or from treating patients outside the hospital within this radius except in cases of emergency.

Services rendered by the partnership would be limited to emergency treatment. Follow-up care would have to be referred to the patient's personal physician or, where the patient had no personal doctor, to members of the attending staff on a rotation basis.

Copies of the sample agreement are available from the Department of Hospitals and Medical Facilities, American Medical Association, 535 North Dearborn Street, Chicago, Illinois. 60610.

(Continued on page 586)

The Month in Washington

Federal agencies relaxed regulations for sale of Ipecac, ordered warning labels on certain antihistamines, and cracked down on two patent medicines.

The Food and Drug Administration decided that ready availability of Ipecac as a remedy for poisoning outweighed the dangers of possible misuse and placed it back on the list of drugs for sale over the counter without a prescription.

Since Ipecac was placed on a prescription-only basis in January, 1964, the American Medical Association, the American Academy of Pediatrics, and the Association of Poison Control Centers had urged that the vomit-inducing drug be returned to its former status.

Under the new FDA ruling, FDA's Bureau of Medicine told the Pediatrics group in Chicago that FDA decided it would be in the public interest to permit Ipecac to be sold over the counter in one-fluid-ounce bottles with special warnings on dangers of its misuse.

The FDA also ruled that in the future antihistamines containing meclizine, cyclizine and chloro-cyclizine must bear labels warning against use by pregnant women without medical advice. However, they were left on the over-the-counter list. The FDA said massive doses of these drugs in test animals had produced congenital abnormalities, but there had been no evidence they have caused abnormalities in human babies.

Chas. Pfizer & Co., Inc., one of the companies that manufacture such antihistamines, protested the decision as not being "in accordance with the medical facts."

A House Government Operations Subcommittee headed by Rep. H. L. Fountain (D., N. C.) recently had criticized the FDA for its handling of these antihistamines, contending that stronger warnings were needed and indicating that they should be prescription items.

The FDA ordered a halt to the sale of Alergimist "A" and "B", widely advertised as "cures" for hayfever, bronchial asthma, migraine headaches, and allergic dermatitis.

The product has been actively promoted through newspaper, radio and TV ads without having been passed by the agency as either safe or effective. The product, sold without a prescription, was being distributed by the Brunson Corporation of Miami Springs, Fla. FDA said the same concern previously distributed Allergimist (with two "l"s) until an injunction in September, 1964, was obtained against its interstate shipment.

The Federal Trade Commission ordered the J. B. Williams Co. of New York City to stop allegedly misrepresenting the effectiveness of "Geritol" liquid and tablets. The Commission ruled that Geritol television commercials and newspaper advertisements falsely represent that all cases of tiredness, loss of strength, run-down feeling, nervousness, and irritability indicate a deficiency of iron and that the common, effective remedy for these symptoms is Geritol.

Geritol is not beneficial except in the small minority of persons whose tiredness symptoms are caused by a deficiency of iron or one or more of the vitamins contained in the preparation, the FTC said.



approximating the diuretic efficacy of meralluride

METAHYDRIN®

(trichlormethiazide)

To determine the relative efficacy of thiazide diuretics in congestive heart failure, Metahydrin (trichlormethiazide) and three other thiazides were measured against Mercuhydrin® (meralluride injection)—the standard diuretic. "The results leave little doubt that the diuretic efficacy, that is, the 'ceiling effect' in these terms, is not the same for different thiazides."* The assays ranged from about 40% of the effectiveness of Mercuhydrin through 67%, 77% to 90% for Metahydrin. The latter two values were thought to be significantly different from the lowest value and to be therapeutically important.

*Gold, H., *et al*: Closed Panel Conference: Present Status of the Management of Congestive Failure and Advances in Diuretic Therapy, Journal of New Drugs, 1:177, July-August, 1961.

LAKESIDE LABORATORIES, INC.
Milwaukee, Wisconsin 53201

IN BRIEF: ADMINISTRATION AND DOSAGE: One 2 mg. or 4 mg. tablet once or twice daily. In acute, severe decompensation, Mercuhydrin® (meralluride injection) may be necessary initially.

PRECAUTIONS: As with all effective diuretics, vigorous therapy may produce electrolyte depletion. Patients with severely reduced renal function should be observed carefully since thiazides may be contraindicated. Care should be taken with patients predisposed to diabetes or gout. Patients with a tendency to potassium deficiency, as in hepatic cirrhosis or diarrheal syndromes, or those under therapy with digitalis, ACTH, or certain adrenal steroids, also should be watched carefully.

SIDE EFFECTS: Nausea, flushing, constipation, skin rash, muscle cramps and gastric discomfort have been occasionally noted; rarely thrombocytopenia and bone marrow depression, photosensitivity, cholestatic jaundice, pancreatitis, perimacular edema, gout and diabetes have been caused by administration of thiazides.

CONTRAINDICATIONS: Complete renal shutdown; rising azotemia or development of hyperkalemia or acidosis in severe renal disease; demonstrated hypersensitivity.

HOW SUPPLIED: Bottles of 100 and 1000 tablets.

Book Review

Functions of the Corpus Callosum. By Ciba Foundation Study Group No. 20. E. G. Ettlinger, Editor and Organizer. 156 pages. Price, $3.75. Boston: Little, Brown and Company, 1965.

This book is a collection of ten essays with subsequent discussions included in a symposium on the functions of the corpus callosum presented in London on September 4, 1964. The participants, all renowned authorities in their respective fields drawn from either side of the Atlantic, discuss the evidence obtained by experimental studies in various animals. Clinicians discuss the results of psychological studies involving patients with agenesis and acquired lesions of the corpus callosum. Also discussed is the role of the corpus callosum in the transfer of epileptic activity from one hemisphere to the other.

With the use of sophisticated techniques, it is shown that the corpus callosum is essential in both animals and man for the transfer of learning processes from one hemisphere to the other.

For clinicians, who until recently were perplexed by their inability to detect any deficit in patients with restricted callosal lesions, and for neurosurgeons tending to equate the corpus callosum with a "functionless" organ to be incised with impunity, this symposium should be an eye-opener.

This compact manual is well worth its price and should be on the shelf of every one who is connected with the broad science of neurology.

In Memoriam

John Stuart Gaul, M.D.

John Stuart Gaul died suddenly August 29, 1965, at the age of 77 after a full life of orthopaedic surgery and public service. He was born in Philadelphia, May 28, 1888, of Scottish parents, and grew up on the banks of the Susquehanna River in the village of Lacyville, Pennsylvania, where his father operated a stone quarry. After obtaining a degree in engineering from Pennsylvania State College, he attended and graduated from the Medical-Chirurgical College of Pennsylvania (later to become the Graduate School and Hospital of the University of Pennsylvania School of Medicine).

Subsequently he attended and graduated from the Army Medical School in 1916, and then married Katherine Sanderson Small, daughter of a North Carolina congressman.

Dr. Gaul was a member of the medical department of the Army Expeditionary Force in France in 1917-1918, working to design, establish, and operate the first American military field hospitals of World War I, and for this service General Pershing later awarded him the "General Washington Officer's Award of Merit." (Incidentally, this same gold award with purple ribbon later became the "Purple Heart Award" for the wounded of World War II.) Following the Armistice he was assigned to Walter Reed Hospital duty for four years where he was appointed Chief of the Septic Surgical Service, treating the many residual open wound cases of World War I. It was during these postwar years at Walter Reed that the surgical service began to develop the rudimentary concepts of reconstructive surgery embracing areas of general surgery, neurosurgery, and the relatively new field of orthopaedic surgery. In subsequent years Stuart Gaul frequently referred to those formative times in which there were not even previous concepts, much less prior experience, on which to plan surgical reconstruction of the human body.

He opened a private practice of orthopaedic surgery in Charlotte, North Carolina, in 1923, and subsequently joined several other orthopaedic pioneers of his newly adopted state in the establishment of crippled children's clinics in outlying areas, a service that was later expanded into the present State Crippled Children's Section of the State Board of Health.

During the polio epidemic of 1940 and 1943 he established temporary hospitals for the treatment of acute poliomyelitis at Hickory and Charlotte, in conjunction with the NFIP and with epidemiologists from the Yale University School of Public Health.

He contributed many reports and papers to regional medical journals from 1925-1938, being orthopedic co-editor of Southern Medicine and Surgery in 1936.

From 1932 to 1942 he served on the Charlotte Board of Education, the last two years as chairman.

In 1956 he was presented the Distinguished Service Award by the University of North Carolina School of Medicine for his efforts in helping establish it as a fully accredited four-year medical school.

Although he suffered a coronary occlusion in 1958, subsequently had a cholescystectomy, and then suffered a severe cerebrovascular accident in 1961, from which he never returned to practice, he continued in remarkably good spirits until the final day. He also received an intertrochanteric fracture of the right femur suffered after his stroke, which his friend and colleague Alfred R. Berkeley nailed and from which he fully recovered and returned to full weight-bearing and ambulation.

He is survived by his wife, Katherine, and two sons, John Stuart Gaul, Jr., and Rufus Wharton Gaul, with whom he practiced orthopaedic surgery in partnership. Memorials may be sent to the Medical Foundation, University of North Carolina School of Medicine, Student Loan Fund, Chapel Hill, North Carolina.

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Abbreviations

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BR—Book Reviews
C&O—Committees and Organizations
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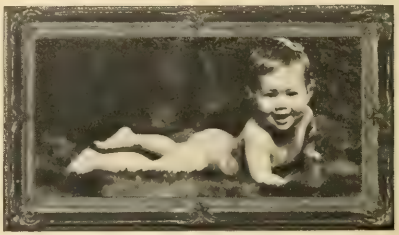
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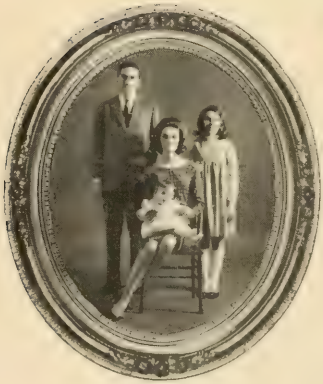
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1—Pomeranze, J., and Gadek, R.J.: Am. Pract. & Digest Treat. *8*:73-77 (Jan.) 1957
2—Asher, L.M.: Am. J. Digestive Diseases *4*:272 (Apr.) 1959

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U. S. Department of Health, Education, and Welfare

Social Security Administration

Policies for the reimbursement of hospital-based specialists, including radiologists, anesthesiologists, pathologists, and physiatrists, for services they provide older people under the medicare program were discussed at a two-day meeting held in November at Social Security Headquarters in Baltimore.

A 44-member consultant group composed of representatives of the medical profession, hospitals, and health insurance organizations took up some of the complex questions involved in the payment for services in these specialties rendered by physicians who are hospital-based or who receive their compensation by or through a hospital.

Although most services provided in a hospital will be covered under the hospital insurance plan covering persons 65 and over, medical or surgical services provided by physicians, except residents and interns, are specifically excluded. However, physicians' services in or out of the hospital are covered under the supplementary voluntary medical insurance program also provided in the medicare legislation.

At its two-day meeting, the consultant group considered possible criteria for distinguishing between the specialists' services which are covered under the hospital insurance program and those covered under the voluntary medical insurance program.

Also up for discussion was the problem of determining the reimbursement due some hospital-based physicians who perform both medical and administrative services—heads of departments, for example.

The advisory group on specialists' services is one of nine work groups being called upon to contribute experience and advice to help the Social Security Administration develop policies for the administration of the Medicare program.

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